


Government
Publications



3 1761 1155608 6

Government
Publication



Digitized by the Internet Archive
in 2022 with funding from
University of Toronto

(3)

THIRTIETH ANNUAL REPORT

OF THE

4571

DEPARTMENT OF MARINE AND FISHERIES

1897

FISHERIES

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST
EXCELLENT MAJESTY

1898

*To His Excellency the Right Honourable SIR JOHN HAMILTON-CAMPBELL GORDON, EARL
OF ABERDEEN, Governor General of Canada, etc., etc.*

MAY IT PLEASE YOUR EXCELLENCY :

I have the honour to submit herewith, for the information of Your Excellency and the Legislature of Canada, the Thirtieth Annual Report of the Department of Marine and Fisheries, Fisheries Branch.

I have the honour to be,

Your Excellency's most obedient servant,

LOUIS HENRY DAVIES,
Minister of Marine and Fisheries.

DEPARTMENT OF MARINE AND FISHERIES,
OTTAWA, 31st December, 1897.

ALPHABETICAL INDEX

TO THE

FISHERIES REPORT

1897

A	
Areas—extent of water.....	PAGE. xii
do oyster culture	273, 274
B	
Behring Sea Question, Report on, by Mr. R. N. Venning	xxiv, 325
do Sealing Fleet of 1897.....	325, 327
do Statement of seal catch, crews, etc.....	329
do Patrol fleet.....	332
do Proposals for supplementary arrangements.....	332
do Request of sealers for relaxation of Paris Regulations.....	334
do Proposed changes in award regulations.....	335
do Expert investigation on the Pribylov Island.....	339
do Conference of fur-seal experts.....	340
do do their joint statement.....	341
do Statement of seal killing by land or sea, 1871-1897.....	344
do Correspondence on pending negotiations.....	346
do do diplomatic, on seal question.....	348
do Prohibition of Pelagic sealing by citizens of U. S.....	362
do Claims, commission.....	363
do Details of award.....	364
do Russian seizures.....	365
do Award "Willie McGowan" and "Ariel".....	365
Bay du Vin oyster beds.....	269
Bass, black, the propagation of, by Prof. Prince, Commissioner.....	xlv
Bertram, A. C., Inspector of Cape Breton Island, reports.....	xxv, 249, 38
Bedeque Bay, P. E. I.....	272
Bounties Fishing.....	10
do regulations.....	10
do Statement No. of claims and amount paid since 1892.....	12
do do of claims received and paid in 1896.....	13, 14, 15
do do comparative, received and paid in since 1882.....	16
do do in detail of all vessels receiving it, 1896.....	20 to 37
British Columbia, Reports by Inspector John McNab.....	235
do List of salmon canneries.....	236
do Statistics of Fisheries.....	239, 241
do Statement of fishing material.....	242
do do seal catch for 1896.....	238
do do do 1897.....	328
Bureau Fisheries Intelligence.....	xxiii, 294, 296
do Report on, by W. M. Hutchins for 1897.....	296
do List of reporters.....	295
Bureau detailed reports, chiefly herring, cod, haddock, lobsters, mackerel, salmon, etc.....	296 to 323
C	
Cape Breton Island. (See Nova Scotia District No. 1).....	xxv, 271
Carleton, P. Q., re oyster culture.....	160, 260
Catellier, L. N., reports.....	276
"Carrie E. Philips," U. S. schooner, seizure of.....	276
Chapman, R. A., Inspector, N. B., reports.....	xxvi, 111-124
Cod, remarks on.....	40-150, 296 to 320
"Constance," D. G. cruiser.....	275, 234
Coast, extent of.....	xii
"Cruisers, Canadian," list of, and station	275
Culture, Fish (See "F").....	

	D	PAGE.
Davis, Hy., hatchery officer at Gaspé.....		259
"Dolphin," Govt. Patrol Vessel in Ontario.....		276, 286
Dunn, Capt. E., of D. G. cruiser "Petrel".....		287

	E	
Expenditure.....		1
do Subdivision by provinces.....		2
do Fish Culture.....		3
do Fisheries Protection Service.....		5
do Statement, Comparative.....		8

	F	
Fish Culture.....		243
do Report on, by Prof. E. E. Prince, Commissioner.....		243
do Distribution of fry.....		244-246
do Attempt at breeding Brook Trout.....		244
do Reports of officers in charge of hatcheries.....		248 to 267
do Lists do do.....		
do Hatcheries in British Columbia.....		248
do do Nova Scotia.....		249
do do New Brunswick.....		252
do do Quebec.....		256
do do Ontario.....		263
do Expenditure.....		3
do Oysters report on. (See letter O.).....		268
Fisheries Protective Service.....		xxiii
do Report on, by Commander O. G. V. Spain.....		275
do Cruisers, their captains and their stations.....		275
do Seizure.....		276
do Modus vivendi licenses.....		277
do Mackerel fishery, remarks on.....		278
do Lobsters do.....		281
do List of U. S. fishing vessels boarded by Canadian cruisers.....		292
do List of fishing vessels off Cape Shore.....		280
do Reports from captains of cruisers.....		282
Fisheries of Canada, an account of, by Prof. Prince.....		xxxiii
Fish Fair at Campobello, N.B.....		106
Fish-ways.....		53
Fishery officers, complete list for the Dominion.....		366
do Intelligence Bureau. (See letter B.).....		
do Bounties. (See letter B.).....		
do Statements or Statistics. (See letter S.).....		
do Season of 1897, remarks on.....		xxv
Finlayson, Alex., hatchery officer at Magog.....		262
Ford, L. S., Inspector of Fisheries, N.S., report.....		52-81
Fry, distribution of.....		244-246
do Salmonoid, on the planting of, by Prof. Prince.....		xl
Fishery season of 1897, remarks on.....		xxv

	H	
Hatcheries, Reports on. (See also Fish Culture).....		248 to 267
Herring, remarks on.....		41-105, 296 to 320
Hockin, R., Inspector, Nova Scotia, report.....		xxv, 48-66
Hutchins, W. M., Intelligence Bureau, report.....		296

	I	
Intelligence Bureau. (See letter B.).....		
Inspectors of Fisheries, List of.....		366
do Reports of. (See each Province.).....		

	K	
Kemp, Ernest, oyster expert's report.....		268
Kenefick, John, Newcastle Hatchery.....		265
Kent, Capt. W. H., cruiser "Kingfisher," report.....		283
"Kingfisher," D. G. C., in Fishery Protective Service.....		276-283
Knowlton, Capt. C. T., of the "Osprey" report.....		282

INDEX.

vii

L

	PAGE.
Lake Superior, report and statistics.....	187-196
do Huron do	187-198
do Erie do	190-204
do Ontario do	191-206
do St. Clair do	190-202
do of the Woods do	187-196
Lavoie, Nap., Dr., Fishery Officer.....	xxvii
Lobster, Remarks on.....	39, 49, 281
do Plant.....	xx-101
do Hatchery in Nova Scotia.....	249

M

May, Geo. M., Capt. of the "Constance".....	234
Mackerel, remarks on.....	40, 278-296 to 320
Manitoba, Report by Inspector R. L. Tupper.....	213
do Statistics of fisheries.....	222
do Synopsis of officers' reports.....	216 to 221
Matheson, J. A., Inspector, P.E.I.....	xxvi
Miles, H. S., Inspector, New Brunswick, report.....	xxvi-114
Miller, E. W., Inspector, N.W.T.....	xxviii
Mowat, Alex., hatchery officer at Restigouche.....	256
Moisie and Mingan divisions.....	158
McNab, John, Inspector, British Columbia.....	xxvi, 235-247
McCluskey, Chas., hatchery officer.....	252

N

New Brunswick, Report of District No. 1, by Inspector J. H. Pratt.....	xxvi-103
do do 2 do R. A. Chapman.....	xxvi-111
do do 3 do H. S. Miles.....	xxvi-114
do Synopsis of New Brunswick fishery overseers.....	106, 113, 115
do Statistics of Fisheries, District No. 1.....	120
do do do 2.....	125
do do do 3.....	130
do Statements of value of fishing materials, &c.....	136
do Recapitulation of the yield and value of fisheries.....	134-137
do List of vessels receiving bounty.....	31
do Movements of fish, Intelligence Bureau.....	317
do List of overseers.....	372
Nova Scotia, Report of District No. 1, by Inspector A. C. Bertram.....	xxv-38
do do 2 do Robert Hockin.....	xxv-48
do do 3 do L. S. Ford.....	xxvi-52
do Synopsis of overseers reports.....	43
do Statistics of Fisheries, District No. 1.....	56
do do do 2.....	66
do do do 3.....	81
do Statements of value of fishing materials.....	101-102
do Recapitulations of yield and value.....	100
do List of vessels receiving bounty.....	20
do Movements of fish.....	296
do List of overseers.....	370
N.W. Territories, Report on fisheries by Inspector G. S. Davidson.....	225
do do do E. W. Miller.....	xxviii
do Statistics of fisheries, &c.....	230, 233
North Shore Divisions, reports.....	157

O

Ontario, Synopsis of overseers' reports.....	187
do Statistics of fisheries.....	196
do Statement of fishing materials.....	212
Overseers' Reports. (See each Province.).....	
Oyster Culture, Report on, by Mr. Ernest Kemp.....	xxiv, 268
do do other officers.....	
Ogden, Alfred, hatchery officer, Nova Scotia.....	251-264
"Osprey," Dominion Cruiser.....	276-282

P

Pearson, Capt. Geo. W., cruiser "Dolphin".....	286
Prince Edward Island, Report on fisheries by S. F. Perry.....	138
do do J. A. Matheson.....	xxvi
do Statistics of fisheries.....	140
do Value of fishing materials and lobster plant.....	149

P—Continued.

	PAGE.
Protection Service. (<i>See</i> also letter F.).....	275
Pratt, Capt. J. H., Inspector, annual reports.....	xxvi, 103-290
Parker, Wm., hatchery officer, Sandwich, Ont.....	266
Prince, Prof. E. E., Commissioner, scientific reports.....	xxxiii, xl, xlv
do do fish culture report	243
"Petrel," Dom. cruiser in Ont.....	275, 287

Q

Quebec, Report on the Gulf St. Lawrence Division by Dr. Wakeham.....	150
do do do Dr. Lavoie.....	xxvii
do Synopsis of Overseers' reports do.....	155
do do do Inland Districts.....	159
do Statistics of Fisheries do.....	178
do do Gulf Division	164
do Recapitulation of Yield and Value of Fisheries.....	184, 185
do do Fishing Materials	186
do list of overseers.....	368
do chief fishing ports reported by the Intelligence Bureau.....	319

R

Revenue, Statement of.....	7
do Comparative Statement of.....	8-9
Reports of the Deputy Minister	ix
do Special, by Prof. E. E. Prince	xxxv
do of Inspectors of Fisheries. (<i>See</i> each Province.)	
do of other officers. (<i>See</i> each service.)	

S

Salmon, remarks on.....	152, 235, 236, 296 to 323
Scientific reports by Prof. Prince, Commissioner.....	xxxiii, xl, xlv
Seals. (<i>See</i> Behring Sea report).....	238
Sheasgreen, Isaac, Miramichi Hatchery, report on.....	253
Shediac Oyster Beds.....	268
Spain, O. G. V., Commander F. P. Service, report	275
Staff, outside, list of officers	366
Statistics of Fisheries. (<i>See</i> Statements; also each Province.)	
Statements recapitulating the yield and value of fish.....	xv, xvi
do do Fishing Material, etc.....	xxii
do do number of Fishermen.....	xxl
do of catch of fish in detail. (<i>See</i> also each Province).....	xvl

T

Trout, on the planting of, by Prof. Prince (<i>see</i> Fry).....	
Tracadie, N.S., oyster beds	270
Tupper, R. LaTouche, Inspector, Manitoba, reports.....	xxvii, 213-222

U

United States list of fishing vessels boarded by Canadian cruisers.....	292
do Mackerel seiners and hookers	279-280

V

Value of Fisheries, (<i>See</i> also each Province).....	xiii-xv
Venning, R. N., report on Behring Sea Question.....	xxiv, 325

W

Wakeham, Wm., report (on Gulf Division).....	150
Walker, John, Hatchery Officer at Ottawa, report.....	263
Walbran, Capt. J., D. G. S. "Quadra," of B.C.....	288

REPORT OF THE DEPUTY MINISTER.

To the Honourable

Sir LOUIS H. DAVIES, K.C.M.G.,

Minister of Marine and Fisheries.

SIR,—I have the honour to submit the annual report of the Fisheries Branch of the Department of Marine and Fisheries for the fiscal year ending on the 30th June, 1897. The Fisheries Protection Service, the Fish-culture and Behring Sea Reports comprise the whole calendar year to the 31st December, 1897. In doing so it is interesting to recall the fact that precisely thirty years have elapsed since the department was organized and the fisheries of the Dominion placed under the supervision of a Minister of the Crown at Ottawa. During these three decades the fishing industries have grown with remarkable rapidity, and it cannot be questioned that the enforcement of fishery laws and regulations, and the general administration of the fisheries from the capital, have had on the whole beneficial and salutary results.

At the date of Confederation a branch of the Department of Crown Lands for the United Provinces of Upper and Lower Canada was responsible for this administrative work. This branch organized in 1859 had done useful work; but in the provinces of Nova Scotia and New Brunswick, where the fisheries were of the highest value and importance, no parallel organization existed. It is true that in these two provinces there existed a body of statutory and municipal regulations, but failing effective machinery to carry these regulations out, and in the absence of a proper system under which the restrictions could be enforced, these regulations and restrictions were practically a dead letter. "The fisheries were subject to serious abuses," it was stated authoritatively at the time, "that in many respects had already reduced them almost to exhaustion." The work of regulation, protection and development effected a beneficial change, and encouraging results attended the efforts of the department. Where the existing fishery laws could, by slight changes and improvements, be made more serviceable this was done, and a staff of officers was organized to enforce these amended regulations. In the "Fisheries Act" of 1867, under which the fishery laws of Nova Scotia were practically left intact, and the New Brunswick Acts incorporated, there were consolidated the various provincial regulations, with power provided for altering them from time to time, and substituting new and improved by-laws.

The code of fishery regulations resulting from attempts year after year to make them more effective by additions and amendments, has been regarded by other countries as beneficial to our fisheries and worthy of imitation. Thoughtful men in various States of the neighbouring republic have repeatedly expressed their approval and admiration of the system of fishery conservation and improvement in Canada. In the last report of the Michigan State Fish Commissioners published this year (1897) reference is made to the unwisdom of the policy of non-protection, *i.e.*, of free fishing, adopted in many States, "especially" to quote from the Commissioners' report (pp. 16 and 17).

"When we consider that the country lying opposite our border, having an extent of territory on the Great Lakes far exceeding that of our own and adjoining states, long since awakened to the necessity of conserving her fisheries. Without taking advice from her neighbours or awaiting their action she went sturdily, forcefully and promptly to work to enact regulations which have resulted in preserving her waters to a point where her fisheries are more profitable than our own. We refer to the Dominion of Canada, whose fisheries have been watched over and cared for by men keenly alive to their importance and the necessity for their preservation. Her territory is opposed to our own on our entire eastern coast and to the greater part of our Lake Superior coast.

"The extent of our coast adjoining Ohio is small, but that state has passed more laws for the protection of her fisheries than our own and so has Minnesota. Wisconsin has but a small amount of border compared with ours and her fisheries are insignificant in extent or value with Michigan's.

"Illinois has ceased to be a fish producing state. So has Indiana, which has but a fragment of frontage on the great lakes. Both of these states have permitted their fisheries to be destroyed without an effort to prevent it. So there can be no expectation they will take action in this regard.

"Canada protects her fish by the imposition of a close season for all the lakes, of the month of November, which is the great spawning month of the whitefish and salmon trout. She also prescribes the number of pounds that may be set in a string, the number of strings in a locality, the size of the mesh, the distance nets shall be set from shore, and the manner in which they may be set in channels. She also imposes a license upon nets and boats, and in other respects exercises a complete control over an industry she appreciates to be of great material value.

"Intelligent laws should be passed and *enforced*, permitting the taking of adult fish, and leaving the smaller ones to come to maturity. Opportunity should be afforded the gravid fish to spawn unmolested. If this be done, with the large output of artificially hatched fish now being put in the lakes, we know that the waters of our state will in a few years again teem with the whitefish and salmon trout. The food of the young and of the adult fish is as plentiful now as it ever has been, and if by the enactment and enforcement of just laws we throw the protection about the fisheries they need, and which the commonest intelligence must see is necessary for their preservation, we shall have ever ready at hand a wholesome food, abundant in quantity, cheap in price, that has grown to maturity, without cost or care.

"Objection has always been raised by the opponents of the regulation of the fisheries, that we should secure co-operation from adjoining states and secure a uniformity of statute in all. The fallacy of this argument so far as our own fisheries are concerned, is apparent. But if we admit that as the argument, would it not be an equally bad policy for the state to attempt to stamp out epidemic diseases, unless adjoining states would agree to take similar action? Facts show that Michigan has more value in her fisheries than any other adjoining state, and under such conditions the first duty of the state is to attend to its own material interests.

"The state has taken pains to surround the game fish, like the brook trout, the game birds, and the game quadrupeds of this state with the most rigid laws protecting them from interference during their period of reproduction, and for a

sufficient time thereafter to protect the young until they can care for themselves; yet the state has not invested a single dollar in the propagation of any of these, except the brook trout, neither does it derive any substantial return from their capture. Stringent laws have been passed and are rigidly enforced to protect the peach orchards of the state from the scourge known as the "yellows." Such laws are just, and have been adopted and are rigorously enforced in the interest of the public good; but the great commercial fisheries of the state that yield a million of dollars yearly at the wholesale price, are constantly subjected to the most destructive methods of fishing, with the certain prospect that in a short time they will become absolutely extinct. If there is any one thing in the state that deserves protection, it is the commercial fisheries. It is not only a matter of the greatest concern to our present population, but it is of vital interest to those who are to come after us."

There is, of course, no doubt that wise protection of spawning fish and judicious limitation of fishing operations to prevent overfishing must in the long run restore endangered or depleted fisheries; but on the Great Lakes the steps taken by this department have been only partial in their effects an account of the reverse policy pursued in the United States portion of these prolific waters. The department has indeed been constrained to carry out concessions and relaxations, and the remarks of Mr. Herschell Whitaker, so well known as a Fish Commissioner for the State of Michigan and one of the most enlightened and enthusiastic advocates of fish preservation in these international inland waters may be quoted. Referring to one of these Orders in Council which nullified certain protective provisions in the fishery regulations of Canada, Mr. Whitaker observes:

"The effect of this order meant a notice to the Canadian fishermen that until further notice they could join their American fellow-fishermen in working the final destruction of the commercial fisheries of the lakes.

"The Canadian government exhibited wisdom in making the original order. The reasons for its promulgation were founded on the experience of years of observation of the pernicious and ruinous effect of the practices of the netters on the lakes. The enforcement of the order was wholesome and resulted in better fishing in their waters than in ours. Ever since the order was given effect, the Department of Marine and Fisheries has sought by every means in its power, to urge upon those entrusted with the passage and enforcement of laws for the regulation of the fisheries upon the American side of the waters, the necessity of a co-operation with them in the passage and enforcement of a similar act. They have had occasion to feel disheartened at the result. They have had further to bear the importunities of the lake fishermen of the different provinces and the petty politicians for a revocation of the order, because the states bordering the lakes upon the other side permitted their fishermen to fish at any and all times and with all sorts of devices. And so, at last, the order has been revoked—in a spirit of weakness, perhaps—until such time as the states shall see fit to join the Dominion in an effort to protect the fisheries.

"No action, either public or private, concerning the fisheries of this country, has ever been taken which may be more pregnant of evil, or perhaps of good result, if we shall profit by the lesson, than this order of revocation. The result must depend on future action or non-action on the part of the states whose territory is co-extensive with that of Canada on the lakes, in moving for the preservation of the great lake fisheries, by the passage of just and reasonable laws controlling the fishermen. While the action of the Department of Marine and Fisheries is one to be deeply regretted it has been, perhaps, in a measure justified by the absolute lack of co-operation on the part of the bordering states in meeting the Canadians upon this question in a spirit of fairness, and with a desire to protect the public's interests."

(Trans. Am. Fisheries Society 1895, pp 61 & 62).

EXPENDITURE AND REVENUE.

The details of the total expenditure for the different fisheries services during the last fiscal period, amounting to \$443,586, will be found in the first appendix of this report. This comprises fisheries proper, \$99,731; fish-culture, \$27,330; fisheries protection service, \$99,357; miscellaneous expenditure, \$62,777, besides the \$154,389 distributed as fishing bounties.

The total amount received during the same period as revenue from fishery licenses, fines, &c., in the different provinces of Canada is given at \$106,469.

This amount also includes the *modus vivendi* licenses granted to United States fishing vessels. See page 7.

FISHING BOUNTIES.

The sum of \$154,389 was paid to the deep-sea fishermen of the Maritime Provinces during the year 1896. Of this amount, \$57,014 were divided amongst 862 vessels manned by 5,665 men, and \$97,385 amongst 23,821 fishermen using 14,106 boats. The total number of claims paid for bounty was 14,975.

Since its inception (1882), over *two million and a quarter dollars* were paid by this department to encourage the Canadian fishermen in developing our sea fisheries.

The regulations governing the payment of said bounty are given in detail in Appendix No. 2 of this volume, as well as a complete list of all vessels having received such bounty for the year 1896.

GENERAL STATISTICS OF FISHERIES.

EXTENT OF COAST.

The fisheries of Canada are the most extensive in the world, comprising an immense sea-coast line, besides innumerable lakes and rivers. The eastern sea-coast of the Maritime Provinces from the Bay of Fundy to the Straits of Belle Isle covers a distance of 5,600 miles, and that of British Columbia is given at 7,180 miles, that is more than double that of Great Britain and Ireland.

While the salt water inshore area, not including minor indentations, covers more than 1,500 square miles, the fresh water area of that part of the great lakes belonging to Canada is computed at 72,700 square miles, not including the numerous lakes of Manitoba and the Territories all stocked with excellent species of food fishes.

VALUE OF THE FISHERIES.

The value of the sea and inland fisheries in 1857 was estimated at under one million dollars, and in 1859 they were valued at about a million and a half dollars, but in 1867 they had reached \$4,000,000; in 1877 \$12,000,000; in 1887 \$18,386,000, and in 1896 \$20,400,000.

This amount is subdivided by provinces as follows, showing the fluctuations as compared with the previous year :—

Provinces.	Value.	Increase.	Decrease.
	\$	\$	\$
Nova Scotia.....	6,070,895		142,236
New Brunswick.....	4,799,433	396,275	
British Columbia.....	4,183,999		217,355
Quebec.....	2,025,754	157,834	
Ontario.....	1,605,674	21,201	
Prince Edward Island.....	976,126		710
Manitoba and North-west Territories.....	745,543		6,923

While the provinces of New Brunswick, Quebec and Ontario gave an aggregate increase of \$575,310, the other provinces show a decrease of \$367,224, making a net surplus of \$208,086 over the total value of last year. The various fluctuations are fully explained in the different inspectors' reports comprised in Appendices 3 to 10.

The above does not include the large quantity of fish consumed by the Indian population of British Columbia.

The comparative tables at page xviii give the totals for each period of twelve months during the last twenty-seven years, but the above figures sufficiently show how considerable has been the progressive advance in value of the Canadian fisheries.

The following table shows the relative values of the principal kinds of commercial fishes (above \$100,000) for the year 1896 as compared with the values of the preceding year :—

Kinds of Fish.	Amount.	Increase.	Decrease.
	\$	\$	\$
Salmon.....	4,001,679	268,962	
Cod.....	3,619,385		19,134
Herring.....	2,909,744	123,228	
Lobsters.....	2,205,762		4,334
Whitefish.....	773,345	6,038	
Mackerel.....	727,743		8,912
Trout.....	713,449	10,860	
Smelts.....	498,539	47,431	
Haddock.....	493,384	48,681	
Hake.....	276,620	65,764	
Pickarel.....	274,931		28,365
Halibut.....	253,435		17,466
Pollock.....	221,118	72,351	
Alewives.....	209,194	16,762	
Sardines.....	205,249		218,243
Oysters.....	194,296	2,000	
Sturgeon.....	152,757		2,419
Tom cod and frost fish.....	137,832		693
Eels.....	132,942		18,494

The quantity of fish used as bait is valued at \$384,219, and that of fish oil at \$224,633. The seal skins are valued at \$520,250.

With the exception of salmon which shows an increase of over a quarter of a million dollars, of herring of over \$100,000, and the falling off in the sardine industry, the other fluctuations in the values of the principal kinds of fish as compared with the previous yield are not very considerable, as a glance at the above table will show. The large surplus noted in the salmon yield is not only due to an immense pack in the British Columbia salmon industry, but also to the improved catch of fresh salmon in the Maritime Provinces. The decline in the sardine industry is chiefly from New Brunswick, where the strikes in the neighbouring state during the packing season necessarily limited the production for want of markets.

Between the years 1869 and 1896 inclusive the five principal commercial fisheries have yielded as follows :—

Cod	\$106,433,217
Herring.	54,373,042
Lobsters	48,964,860
Salmon	45,740,470
Mackerel... ..	37,589,835

RECAPITULATION

Of the yield and value of the Fisheries in the Dominion of Canada for the Year 1896.

No.	Kinds of Fish.	Quantity.	Value.	Total Value.
			\$	\$
1	Cod, dried	Cwt. 809,608	3,610,935	
2	do tongues and sounds	Brls. 845	8,450	3,619,385
3	Salmon, preserved in cans.	Lbs. 29,872,740	2,988,258	
4	do fresh	" 5,439,942	965,029	
5	do pickled	Brls. 3,186	36,498	
6	do smoked	Lbs. 49,133	11,894	4,001,679
7	Herring, salted	Brls. 490,171	2,183,559	
8	do fresh	Lbs. 22,289,796	504,893	
9	do smoked	" 10,980,430	221,292	2,909,744
10	Mackerel, salted	Brls. 37,765	523,710	
11	do fresh	Lbs. 2,427,972	199,033	727,743
12	Lobster, preserved in cans.	" 10,906,638	1,526,928	
13	do alive or fresh.	Tons. 8,988	678,834	2,205,762
14	Hake, dried	Cwt. 94,808	241,687	
15	do sounds.	Lbs. 69,867	34,933	276,620
16	Haddock, dried	Cwt. 125,122	421,204	
17	do smoked (finnan haddies)	Lbs. 1,116,000	72,180	493,384
18	Pollock, dried	Cwt. 88,781		221,118
19	Trout	Lbs. 6,950,986	690,699	
20	do	Brls. 2,275	22,750	713,449
21	Whitefish.	Lbs. 13,374,000		773,345
22	Smelts	" 9,970,805		498,539
23	Halibut.	" 3,672,625		253,435
24	Shad	Brls. 8,586		87,370
25	Eels	Lbs. 1,037,535	62,252	
26	do	Brls. 7,333	70,690	132,942
27	Alewives	" 52,616		209,194
28	Sardines	" 86,981	176,414	
29	do preserved.	Cans. 576,700	28,835	205,249
30	Bass	Lbs. 1,294,595		94,442
31	Pickarel.	" 6,897,810		274,931
32	Pike	" 3,594,790		99,008
33	Maskinongé	" 807,950		48,477
34	Sturgeon.	" 2,403,801		152,757
35	Squid	Brls. 24,500		98,000
36	Flounders	Lbs. 189,159		9,613
37	Ouananiche	" 90,000		5,400
38	Oysters	Brls. 48,574		194,296
39	Clams	" 19,791		70,960
40	Perch	Lbs. 1,333,550		38,840
41	Tom cod or frost fish.	" 2,657,465		137,832
42	Oulachons	" 581,500		29,550
43	Coarse and mixed fish.	Brls. 104,832		284,639
44	Home consumption not included above.	" 1,894,856		27,896
45	Fur seal skins (British Columbia).	No. 55,677		501,093
46	Hair do	" 16,808		19,157
47	Sea Otter skins.	" 23		4,025
48	Beluga (white whale)	" 222		5,328
49	Fish oils	Galls. 557,140		224,633
50	do used as bait	Brls. 256,146		384,219
51	do do manure.	" 127,658		63,830
52	do guano.	Tons. 3,416		49,540
Total for 1896.				20,407,424
do 1895.				20,199,338
Increase.				208,086

STATEMENT of the Production of each Branch of the Fisheries

Number.	KINDS OF FISH.	NOVA SCOTIA.		NEW BRUNSWICK.		BRITISH
		Quantity.	Value.	Quantity.	Value.	
			\$		\$	
1	Cod, dried..... Cwt.	485,625	2,151,575	108,877	489,946	2,872
2	do tongues and sounds..... Brls.	574	5,740	59	590	
3	Salmon, preserved in cans... Lbs.	8,124	1,219	11,060	1,659	29,853,056
4	do fresh..... "	537,926	107,585	2,637,565	527,513	1,229,595
5	do pickled..... Brls.	408	6,528	16	256	2,413
6	do smoked..... Lbs.	7,783	1,557			41,350
7	Herring, salted.... Brls.	158,236	689,352	232,218	1,044,981	1,000
8	do fresh..... Lbs.	508,895	5,406	13,469,760	269,395	191,000
9	do smoked..... "	712,500	14,250	10,195,600	203,912	21,050
10	Mackerel, salted..... Brls.	25,345	354,830	1,426	19,964	
11	do fresh..... Lbs.	1,717,317	113,754	698,975	83,877	
12	Lobster, preserved in cans..... "	5,363,300	750,861	2,355,807	329,813	
13	do alive or fresh.... Tons.	7,627	572,044	1,357	106,490	
14	Hake, dried..... Cwt.	54,930	134,969	25,833	64,582	
15	do sounds..... Lbs.	19,665	9,832	22,282	11,141	
16	Haddock, dried..... Cwt.	102,354	341,516	20,616	72,156	
17	do smoked..... Lbs.	321,000	25,680	795,000	46,500	
18	Pollock, dried..... Cwt.	42,835	106,253	45,946	114,865	
19	Trout..... Lbs.	127,960	12,796	176,140	17,614	64,500
20	do..... Brls.					
21	White-fish..... Lbs.	13,753	690			
22	Smelts..... "	494,897	24,744	8,310,063	415,503	55,000
23	Halibut..... "	1,017,707	101,771	215,620	21,562	2,276,556
24	Shad..... Brls.	2,105	21,050	5,731	57,310	
25	Eels..... Lbs.					
26	do..... Brls.	3,587	35,870	2,769	27,690	
27	Alewives..... "	17,141	67,293	34,585	138,340	
28	Sardines..... "	200	800	83,979	167,208	
29	do..... Cans.			477,500	23,875	
30	Rass..... Lbs.	6,580	658	348,395	34,806	
31	Pickarel..... "			132,300	6,615	
32	Pike..... "					
33	Maskinonge..... "					
34	Sturgeon..... "			28,800	2,415	380,500
35	Squid..... Brls.	20,402	81,608	1,596	6,384	
36	Flounders..... Lbs.	109,680	5,484	79,479	4,129	
37	Ouananiche..... "					
38	Oysters..... Brls.	2,460	9,840	14,700	58,800	1,200
39	Clams..... "	4,208	28,672	10,578	24,399	3,007
40	Perch..... Lbs.					
41	Tom Cod or frost fish..... "	82,795	4,140	2,570,870	128,544	
42	Oulachons..... "					581,500
43	Coarse or mixed fish..... Brls.	16,638	44,606	24,027	48,464	15,384
44	Home consumption not included above.....					
45	Fur, seal skins, B.C..... No.					55,677
46	Hair do..... "	1,103	1,373	21	29	3,700
47	Sea Otter skins..... "					23
48	Beluga (white whale) skins..... "					
49	Fish oils..... Galls.	243,650	97,459	70,572	30,007	61,500
50	Fish used as bait..... Brls.	76,419	114,628	94,759	142,138	
51	do manure..... "	17,392	8,697	80,172	40,086	
52	Fish guano..... Tons.	991	15,765	635	15,875	
Totals:.....			6,070,895		4,799,433	

in the different Provinces of Canada for the Year 1896.

COLUMBIA	QUEBEC.		ONTARIO.		PRINCE EDWARD ISLAND.		MANITOBA AND N. W. TERRITORIES.		Number.
Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
\$		\$		\$		\$		\$	
14,360	189,417	852,376			22,817	102,676			1
	211	2,110			1	10			2
2,985,305					500	75			3
122,959	1,034,856	206,971							4
24,130	349	5,584							5
10,338									6
5,000	45,479	204,656	3,555	15,997	49,683	223,573			7
5,730	1,777,700	35,154	6,289,166	188,675	53,275	533			8
2,105	51,080	1,021			200	4			9
	6,835	95,690			4,159	58,226			10
					11,680	1,402			11
	1,158,822	162,235			2,028,709	284,019			12
	4	300							13
					14,045	42,135			14
					27,920	13,960			15
	922	3,227			1,230	4,305			16
									17
									18
6,450	494,300	49,430	5,975,661	597,566	24,425	2,443	88,000	4,400	19
			2,275	22,750					20
	132,927	10,634	3,432,560	272,283			9,794,760	489,738	21
2,750	431,645	21,582			679,200	33,960			22
113,828	160,642	16,064			2,100	210			23
	750	9,010							24
	897,550	53,853	139,985	8,399					25
	317	3,170			660	3,960			26
					890	3,560			27
	2,802	8,406							28
	99,200	4,960							29
	119,465	10,248	804,155	48,249			16,000	480	30
	268,945	13,447	2,998,595	149,930			3,497,970	104,939	31
	169,695	8,485	1,101,050	44,042			2,324,045	46,481	32
	48,590	2,915	759,360	45,562					33
19,025	136,618	7,799	1,590,135	110,130			267,748	13,387	34
	2,351	9,404			151	604			35
									36
	90,000	5,400							37
4,800					30,214	120,856			38
9,022	1,437	7,185			561	1,683			39
	156,596	4,698	1,111,160	33,335			65,800	808	40
		4,960			3,800	190			41
29,550									42
46,154	8,957	27,847	17,188	68,755	700	1,400	21,938	47,412	43
250,000							1,894,856	37,897	44
501,093									45
2,775	11,984	14,980							46
4,025									47
	222	5,328							48
24,600	162,655	65,062			18,763	7,505			49
	51,052	76,578			33,916	50,874			50
	29,969	14,985			125	62			51
					1,790	17,900			52
4,183,999		2,025,754		1,605,673		976,125		745,542	

RECAPITULATION

Showing the Total Value of the Fisheries in the respective Provinces of Canada, from 1870 to 1896, inclusive, as compiled from the Annual Reports of the Department of Fisheries.

Year.	Nova Scotia.	New Brunswick.	Prince Edward Island.	Quebec.	Ontario.	British Columbia.	Manitoba and North-west Territories.	Total for Canada.
	\$	\$	\$	\$	\$	\$	\$	\$
1870.	4,019,425	1,131,433	No data	1,161,551	264,982	No data	No data	6,577,391
1871.	5,101,030	1,185,033	do	1,093,612	193,324	do	do	7,573,199
1872.	6,016,835	1,965,459	do	1,320,189	197,653	do	do	9,570,116
1873.	6,577,087	2,285,662	207,595	1,391,564	293,091	do	do	10,754,997
1874.	6,652,302	2,685,794	288,863	1,608,660	446,267	do	do	11,681,886
1875.	5,573,851	2,427,654	258,927	1,506,759	453,194	do	do	10,350,385
1876.	6,024,050	1,953,389	494,967	2,097,668	437,229	104,697	do	11,117,000
1877.	5,527,858	2,133,237	763,036	2,560,147	438,223	583,433	do	12,063,384
1878.	6,131,600	2,305,790	840,344	2,664,055	348,122	925,767	do	13,293,678
1879.	5,752,937	2,554,722	1,402,301	2,820,395	367,133	631,766	do	13,529,254
1880.	6,291,061	2,744,477	1,675,089	2,631,556	444,491	713,335	do	14,499,979
1881.	6,214,782	2,930,904	1,955,290	2,751,962	509,903	1,454,321	do	15,817,162
1882.	7,131,418	3,192,339	1,855,687	1,976,516	825,457	1,842,675	do	16,824,092
1883.	7,689,374	3,185,674	1,272,468	2,138,997	1,027,033	1,644,646	do	16,958,132
1884.	8,763,779	3,730,454	1,065,619	1,694,561	1,133,724	1,358,267	do	17,766,404
1885.	8,283,922	4,005,431	1,293,430	1,719,460	1,342,692	1,078,038	do	17,722,973
1886.	8,415,362	4,180,227	1,141,991	1,741,382	1,435,998	1,577,348	186,980	18,679,288
1887.	8,379,782	3,539,597	1,037,426	1,773,567	1,531,850	1,974,887	129,084	18,380,103
1888.	7,817,030	2,941,863	876,862	1,860,912	1,839,869	1,902,135	180,677	17,418,510
1889.	6,346,722	3,067,039	866,430	1,876,194	1,963,123	3,348,067	167,679	17,655,256
1890.	6,636,444	2,699,055	1,041,109	1,615,119	2,019,637	3,481,432	232,104	17,714,902
1891.	7,011,300	3,571,050	1,238,733	2,008,678	1,806,389	3,008,755	332,969	18,977,878
1892.	6,340,724	3,263,922	1,173,856	2,236,732	2,042,198	2,849,483	1,088,254	18,911,171
1893.	6,407,279	3,746,121	1,133,368	2,218,905	1,694,930	4,443,963	1,042,093	20,686,661
1894.	6,547,387	4,351,526	1,119,738	2,303,386	1,650,968	3,950,478	787,087	21,719,573
1895.	6,213,131	4,403,158	976,836	1,867,920	1,584,473	4,401,354	752,466	20,199,338
1896.	6,070,895	4,799,433	976,126	2,025,754	1,605,674	4,183,999	745,543	20,407,425
Totals.	177,942,367	80,940,323	25,042,091	52,755,301	27,906,897	45,458,906	5,644,846	415,746,655

CAPITAL AND MEN ENGAGED IN THE FISHERIES OF CANADA.

The accompanying statements show that last year over 75,000 men were engaged in the Canadian fishing industry, using nets and other fishing gear and fixtures aggregating a capital of over *nine and three quarters million dollars*. Besides the 1,200 fishing schooners and tugs valued at two million dollars manned by 9,735 sailors, 65,500 fishermen, using 35,400 boats, valued at over one million dollars, toiled the sea for a livelihood, using altogether 6,344,450 fathoms of nets.

The lobster plant for 1896 amounted to \$1,114,920. This represents the 665 canning establishments dispersed on the littoral of the Maritime Provinces, and 1,100,000 traps required to keep them going. Over 14,000 persons find employment in this branch of industry alone.

COMPARATIVE TABLE showing Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries of Canada, together with the Value of Fishing Materials employed, from 1879 to 1896.

YEAR.	VESSELS.			BOATS.		Value of Nets and Seines.	Value of other Fishing Material.	Total of Capital Invested.
	No.	Tonnage.	Value.	No.	Value.			
						\$	\$	\$
1879.....	1,183	43,873	1,714,917	25,616	854,289	988,698	456,617	4,014,521
1880.....	1,181	45,323	1,814,688	25,266	716,352	985,978	419,564	3,936,582
1881.....	1,120	48,389	1,765,870	26,108	696,710	970,617	679,852	4,113,049
1882.....	1,140	42,845	1,749,717	26,477	833,137	1,351,193	823,938	4,757,985
1883.....	1,198	48,106	2,023,045	25,825	783,186	1,243,366	1,070,930	5,120,527
1884.....	1,182	42,747	1,866,711	24,287	741,727	1,191,579	1,224,646	5,014,663
1885.....	1,177	48,728	2,021,633	28,472	852,257	1,219,284	2,604,285	6,697,459
1886.....	1,133	44,605	1,890,411	28,187	850,545	1,263,152	2,720,187	6,814,295
1887.....	1,168	44,845	1,989,840	28,092	875,316	1,499,328	2,384,356	6,748,840
1888.....	1,137	33,247	2,017,558	27,384	859,953	1,594,992	2,390,502	6,863,005
1889.....	1,100	44,936	2,064,918	29,555	965,010	1,591,085	2,149,138	6,770,151
1890.....	1,069	43,084	2,152,790	29,803	924,346	1,695,358	2,600,147	7,372,641
1891.....	1,027	39,377	2,125,355	30,438	1,007,815	1,644,892	2,598,124	7,376,186
1892.....	988	37,205	2,112,875	30,513	1,041,972	1,475,043	3,017,945	7,647,835
1893.....	1,104	40,096	2,246,373	31,508	955,109	1,637,707	3,174,404	8,681,557
1894.....	1,178	41,768	2,409,029	34,102	1,009,189	1,921,352	4,099,546	9,439,116
1895.....	1,221	37,829	2,318,290	34,268	1,014,057	1,713,190	4,208,311	9,253,848
1896.....	1,217	42,447	2,041,130	35,398	1,110,920	2,146,934	4,527,267	9,826,251

COMPARATIVE TABLE showing the number of men employed in the Fishing Industry since 1879.

Years.	Number of Men in Vessels.	Number of Men in Boats.	Total Number of Fishermen.
1879.....	8,818	52,577	61,395
1880.....	8,757	51,900	60,657
1881.....	8,359	50,679	59,056
1882.....	8,498	52,785	61,283
1883.....	9,966	52,259	62,225
1884.....	9,968	51,854	61,822
1885.....	9,539	53,282	62,821
1886.....	8,927	53,073	62,000
1887.....	8,911	55,247	64,158
1888.....	9,574	53,109	62,683
1889.....	9,621	55,382	65,003
1890.....	8,726	55,000	63,726
1891.....	8,666	56,909	65,575
1892.....	8,330	55,348	63,678
1893.....	8,899	58,854	67,753
1894.....	9,525	61,194	70,719
1895.....	9,804	61,530	71,334
1896.....	9,735	65,502	75,237

RECAPITULATION

SHOWING the Number and Value of Fishing Vessels, Boats, Nets and other Fishing Material, as well as the Number of Fishermen in Canada, 1896.

PROVINCE.	FISHERMEN IN		VESSELS.		BOATS.	GILL-NETS AND SEINES.		Value of Pound-nets, Trap-nets, Trawls, Weirs, &c.	Value of Lobster Plant.	Approximate Value of Freezers, Fish houses and other fixtures not itemized.	TOTAL VALUE.
	Vessels.	Boats.	Number	Tonnage.	Value.	Number	Value.				
Nova Scotia.....	5,801	19,174	593	25,465	878,675	14,549	315,020	2,516,791	659,768	\$	\$
New Brunswick.....	1,035	10,235	274	3,758	131,160	5,562	243,887	772,230	541,991	505,230	3,069,753
Prince Edward Island.	86	4,668	17	493	12,050	2,069	55,551	93,059	36,570	280,305	1,878,459
Quebec.....	242	13,173	40	1,600	34,450	6,961	186,399	320,541	161,000	226,555	371,991
Ontario.....	433	2,865	*86	2,673	231,900	1,970	104,842	1,745,435	236,665	102,831	799,737
British Columbia.....	†2,071	13,854	193	6,802	646,395	3,981	190,430	628,665	480,200	.....	888,532
Manitoba and N.-W.T.	67	1,523	*14	1,655	106,500	906	14,791	267,735	30,740	127,255	2,614,578
										1,297,553	253,201
	9,735	65,502								101,170	
Total . . . . .	.....	75,237	1,217	42,447	2,041,130	35,398	1,110,920	6,344,456	2,146,934	672,057	9,826,251
										1,114,921	

*Mostly all tugs. † Including sealing fleet and crews.

FISHERIES PROTECTION SERVICE.

A full report on the operations of the Fisheries Protection Service during the season of 1897, by Commander O. G. V. Spain, will be found in Appendix No. 12 of this publication. It is pleasing to note that this service has been again carried on in a very satisfactory manner.

With the exception of the D.S.S. "La Canadienne" and "Stanley" which were not put in commission, the fleet of cruisers was about the same as usual, consisting of the following steamers:—The "Acadia," "Constance," "Curlew," "Aberdeen," "Petrel," "Dolphin" and the schooners "Osprey" and "Kingfisher." The "Petrel" and "Dolphin" cruised on the Ontario great lakes, and all the others on the Atlantic coast. The D.G.S. "Quadra" was partly employed on the Pacific coast for the protection of fisheries. Capt. Walbran's report in this respect will be found at page 288. The reports of other Captains commanding cruisers are also published as annex A to appendix 12.

The number of United States fishing vessels taking advantage of the *modus vivendi* licenses was nearly 50 per cent less than during the season of 1896.

Only one seizure of a foreign fishing vessel was made during the last season for violation of the customs laws. This vessel (the "Carrie E. Philips") was subsequently released on payment of a deposit.

Toward the end of the season Commander Spain paid particular attention to the observance of the lobster close-season, and many thousand traps and gear found set illegally were seized and destroyed.

The total amount expended by this service for the last fiscal year is given at \$99,357.

FISHERIES INTELLIGENCE BUREAU.

A full report on this branch of the service by Mr. W. M. Huchins, clerk in charge at Halifax, forms annex C to the Fisheries Protection Service report. In view of the absence of official figures for the yield of fish for 1897, this report on the principal kinds of fish at the most important fishing districts will be found of interest.

FISH CULTURE.

The fish-breeding report for the year 1897 by Professor E. E. Prince, Commissioner of Fisheries, forms Appendix No. 11 of this publication. It also includes a complete description of all proceedings such as the capturing of parent fish, collection of eggs, etc., at the different hatcheries by the respective officers in charge.

There are now fifteen government hatcheries in the Dominion, but the establishments at Dunk River, P. E. Island, and at Selkirk, Manitoba, were not in operation last season.

About *two hundred million fry* were hatched and successfully distributed from the thirteen establishments in operation during 1897, some ninety millions of which were young lobsters.

During the summer an attempt was made to artificially hatch out brook-trout at the Miramichi government establishment, with the co-operation of the Provincial authorities.

The total expenditure for this branch of the service aggregated \$27,330, being over \$10,000 less than the previous year.

OYSTER CULTURE.

A full report of the last season's work of the culture of oysters by the expert, E. Kemp, follows as an Annex to the fish-breeding report, page 268.

Mr. Kemp began operations at Shediac where the beds were found free from eel-grass and the oysters growing in a satisfactory manner. Bay du Vin was next examined and barring certain depredations was also found satisfactory. The expert afterwards devoted his time examining areas most suitable for oyster culture in Cape Breton, Nova Scotia and Prince Edward Island. Mr. Kemp also visited and reported favourably on a certain area of nearly 500 acres in the County of Bonaventure, near Carleton, where a Quebec company has been organized to attempt the culture of oysters on a large scale.

The total water area now under license for a term of years to different parties for private cultivation is given at 1,147 acres.

BEHRING SEA QUESTION.

This question has occupied a particularly prominent position during the year just closed, both as regards the diplomatic correspondence between the different governments interested and the meetings of conferences and commissions.

The conference of fur-seal experts met and concluded their work at Washington during the fall, and diplomatic negotiations have since proceeded looking to some satisfactory settlement of the question which has so long engaged the attention of the three governments concerned.

The argument by the respective counsel before the Behring Sea Claims Commission was completed at Halifax in October and the award of the commissioners was reached at a session in Boston during December.

An article by Mr. R. N. Venning, which forms Appendix No. 13 to this report, treats of this question, embracing a fairly comprehensive reference to the principal features of the case which developed within the year, including statistics, the season's catch, proposals for changes in the regulations, requests for supplementary arrangements for enforcing the present regulations, scientific and expert inquiry into seal life, and other features of interest incidental to the question.

SPECIAL REPORTS.

This report is immediately followed by three special articles of a scientific character by Professor Edward E. Prince, Commissioner of Fisheries for Canada, which will be found very interesting to all parties interested in fish life.

1. *The Fisheries of Canada.*
2. *On the treatment and planting of salmonoid fry.*
3. *The propagation of black bass.*

CONCLUSION.

Fishing Season of 1897.

During the last five years the value of the Canadian Fisheries has but slightly varied above twenty million dollars. By a glance at the preliminary reports received from our different inspectors and officers, it is feared that the yield of the sea for the last season will not equal that of 1896.

In the Maritime Provinces the *lobster* industry, employing about 14,000 hands, using over 1,000,000 traps to supply 665 canneries, in all representing a capital of over \$1,000,000, will show a considerable decline in quantity, fortunately prices were higher than usual. *Mackerel* fishing seems to be steadily failing. Some of those caught were of a large size and commanded high prices in foreign markets. *Cod* may be as plentiful as ever but prices were lower, and the demand in foreign markets somewhat limited.

The *salmon* canning industry of British Columbia has exceeded by far any previous output. The total capture of that game fish in the above named province is estimated at 49,000,000 lbs. for the season of 1897.

CAPE BRETON ISLAND.

Inspector Bertram says that notwithstanding the increased number of lobster canneries and a higher price paid to the fishermen, the production is much inferior to the previous one. This is ascribed to stormy weather as well as to the scarcity of fish. The extension of the fishing time was not generally taken advantage of. The prices of dry cod being very low, this fishery was not prosecuted as vigorously as in former years. Respecting this branch of industry the inspector says: "There is no doubt that one of the causes of the low prices of cod is due to the immense quantity of the French article which finds its way into the markets formerly held by the product of our own fishermen. The French fishermen in Newfoundland and St. Pierre receive a bounty of \$2 per quintal for the fish they catch. This bounty has stimulated the industry to such an extent that at least sixty per cent more are now caught by French fishermen than before they received a bounty from their government. Canadian and Newfoundland fishermen complain bitterly of the advantage the French fishermen have over them and the competition they have to suffer from the product of foreigners even in their own country." The spring and fall run of herring were as good as formerly but the summer run of fat herring was a complete failure. The cause of this scarcity is unexplained, and it is quite a loss to the Island as these fat herring were easily taken and always commanded a good price. The mackerel fishing will be one of the poorest on record. Prices ruled high. Salmon fishing both angling and netting were satisfactory, especially the latter. The Margaree River is now getting to be quite a sportsmen's resort.

NOVA SCOTIA.

Inspector Hockin says that the fisheries of his district during 1897 will be as follows: codfish, haddock, hake and pollock, about 90 per cent of last year's catch; herring, an increase of 60 per cent; mackerel and alewives a decrease of 50 per cent,

while lobsters and salmon fell about 20 per cent. Of the minor branch of the fishing industry there will not be any material difference from previous years.

Inspector Ford, of the western counties, reports that while the bank fishermen have secured an average yield, the shore fishermen have fared poorly. Prices were discouragingly low. Herring will yield as much, perhaps more than during the previous year. Mackerel seem to have almost deserted that part of the coast, and their capture was a complete failure. Lobsters are getting scarce; it now requires more men with an increased plant to secure the same or even a smaller production. Mr. Ford says their bays and harbours are overfished and the natural propagation of the species is not sufficient to cope with the annual drain of mature fish.

NEW BRUNSWICK.

Inspector Pratt, of the Bay of Fundy coast states that although the strikes of the employees of the Maine Sardine Canneries somewhat interfered with the weir catch of herring, still the general results will prove satisfactory. Herring were later than usual in appearing on the Grand Manan grounds, and the catch of these large fish will be much below the average. Lobsters will produce about the same quantity as in 1896, with a slight advance in value. The cod family or line fish will show a considerable diminution attributed to scarcity of fish.

Inspector Chapman, for the eastern counties of the above named province remarks that although the fisheries of his district have more than doubled since 1890, and will probably aggregate over \$3,000,000, he has to report a falling off for the first time since he has taken charge of the division. "This deficiency," says this officer, "is principally in salmon, mackerel and smelts with the usual yearly shrinkage in the lobster pack. Codfish were plentiful, but stormy weather and low prices may also have slightly reduced the catch of this staple fish below the large capture of last year. Smelts were not less abundant than in 1896, but the weather was not so favourable as during the previous winter. Salmon, owing, it is believed, to the late cold spring, were very late ascending the rivers, but the pools are reported well filled this fall. Mackerel were almost a failure on all parts of their coast."

Inspector Miles, of the western and inland counties, including St. John, expects a better yield of the fisheries generally, as prices of fish were higher and more men went in the business. While there will be a falling off in the catch of shad, alewives and sardines, there will be marked improvement in the yield of salmon, lobsters and the cod family. Herring about an average catch.

PRINCE EDWARD ISLAND.

Mr. J. A. Matheson, who has succeeded Mr. Perry as inspector of fisheries for Prince Edward Island, states that the sea product of 1897 will be below that of previous years. The lobster pack is short, but owing to higher prices, the aggregate value will not be considerably lessened. Stormy weather and scarcity of bait have somewhat interfered with the cod and hake fishery and reduced their catch. Here also, mackerel is reported as a failure, the worse in fifty years. "The oyster fishery," adds this officer, "has been energetically pursued, stimulated no doubt by the present exceptionally high prices. Hitherto the supply has been obtained from Prince

County chiefly from Richmond Bay, but the demand has caused the beds in Queen's County, formerly little used, to be operated. As some interest seem arising in oyster culture, a large future supply may be looked for." Extensive preparations are made for smelt fishing in December. The trout streams are in good condition, affording ample sport to tourists and visitors.

PROVINCE OF QUEBEC.

Dr. Lavoie, fishery officer, in charge of the Gulf St. Lawrence Division states, that on the whole the fishery operations were satisfactory, and the north shore fishermen need not dread the long winter season. Cod struck abundantly everywhere except at Magdalen Islands, where the yield proved poor. It is true that cod fishing was somewhat neglected for the lobster fishing in the vicinity of the islands. Cod was caught as far up the St. Lawrence as Cape Chatte and at Carleton in Bay des Chaleurs where it had not been noticed for years. The price of this staple fish, however, ruled very low. Herring seemed plentiful and the catch was only limited by a scarcity of curing material. Few mackerel were caught. The salmon yield will be far below that of last year, which was an exceptional season. The shortage in the lobster pack is somewhat compensated by the remunerative prices obtained. Traps were seriously damaged by storms in June. The number of canneries is still increasing, at the Magdalen Islands alone there are now 62 such establishments.

ONTARIO.

In Ontario the catch will be about an average one. Fishing in Lake Erie specially is reported very good. The proximity and easy access of good markets renders the fisheries of this province valuable to the majority of parties interested in the fresh water fishing industry.

MANITOBA.

Inspector R. L. Tupper says that the last fishing season has been a disappointing one. In anticipation of a poor market, although the commercial fishing firms had limited the output in their freezers, still they were obliged to give away many tons of fish in the spring. The depression in the United States markets and the open winter on the great lakes and eastern rivers, allowing fishing when these waters are generally frozen up, increased the production and greatly reduced the prices. Sturgeon fishing was vigorously prosecuted. Both its flesh and its caviare are highly appreciated and bring fair remuneration. The demand for pickerel is increasing and they now bring almost as much as whitefish on the market. In Lake Winnipeg a small improvement in the catch of all kinds of fish, excepting whitefish, may be expected. The southern part of Lake Manitoba has been extensively fished during the summer, and unless closely guarded, will become depleted.

Now that railway communications extend to Lake Winnipegosis, there will be a great rush to it. Many fishermen formerly from Lake of the Woods are now seeking licenses thereto. Although the season was unusually stormy, it has passed without any loss of life or serious accidents.

The people are delighted to see the hatchery again in operation as they believe in its efficiency.

NORTH-WEST TERRITORIES.

Inspector E. W. Miller, who has succeeded Mr. Davidson, briefly reports as follows: "The number of licenses applied for and granted during the season of 1897 will show a diminution from the preceding year, but the total catch of fish is likely to be larger, owing to the greater scarcity of game in the northern districts. The lakes that have been restocked with fry have given very favourable results therefrom this year, and increasing demands are likely to be made on the department in this respect. The Indians are beginning to better appreciate the necessity of the close seasons, but the destitution of the half-breds in some localities renders it difficult to strictly enforce the regulations. Fishing for export is confined to the Saskatchewan River and has not proved very profitable. Irrigation ditches in Southern Alberta are having a bad effect on its trout streams and much care will be required in harmonizing the conflicting interests."

BRITISH COLUMBIA.

Inspector John McNab states that the run of *sock-eye* salmon in the Fraser River was unprecedentedly large, and over 40 million cans were packed on that stream alone. In fact, salmon were so plentiful that the insufficiency of labour and material alone prevented a larger output. Of the 65 canning establishments in operation, 44 were on the Fraser River and 21 on the coast. The packing on the northern coast and rivers will be below the average. A new venture, the shipping of fresh salmon in cold storage, direct to England by steamships, was attempted as an experiment, so was a shipment of dry salted salmon to Japan. Should these ventures prove satisfactory, they no doubt will soon assume large proportions. Altogether, the yield of salmon in British Columbia is estimated at 49,000,000 pounds for the season of 1897. Sturgeon fishing is fast becoming an important and valuable industry. Those of the Fraser River are of large size and of superior quality. They can be readily caught with nets, but trawl lines are still extensively used, to the great injury of the fishery as well as to the detriment of honest fishermen. The halibut industry is also making rapid strides and its catch will aggregate nearly one million pounds.

Only 41 schooners were engaged in the sealing industry this year, as against 64 in 1896. The total number of skins is given at 30,410, as against 55,667 last year.

Besides salmon, halibut and sturgeon, the waters of this western province teem with a great variety of valuable food fishes, which are yearly assuming more commercial importance.

REMARKS.

It is generally recognized that fishery statistics, while of the highest value, are of necessity incomplete; the difficulties attending their compilation being very great. Every effort is made through the fishery inspectors and officers to procure complete returns for official use; but the annual reports of the department for obvious reasons understate, no doubt, the total catches of the Canadian fisheries rather than overstate them, and "in justice to the fishery officers through whom

the detailed returns of each season's fishing were procured (to quote from a former report of the department) it should be observed that, considering the limited number of persons employed at nominal salaries and (with few exceptions) at a very moderate expense for disbursements, whose districts extend over such a vast extent of coast, more or less inaccessible at all times, the general accuracy of the materials procured under directions from this department is certainly creditable to their industry and intelligence."

It remains true, as was affirmed officially three decades ago, that there is no country in the world possessing finer fisheries than British North America. As a national possession they are inestimable; and as a field for industry and enterprise they are inexhaustible. Besides their general importance to the country as a source of maritime wealth and commerce they also possess a special value to the inhabitants. The great variety and superior quality of the fish products of the sea and inland waters of these colonies afford a nutritious and economic food admirably adapted to the domestic wants of their mixed and laborious population. They are also in other respect specially valuable to such of our people as are engaged in maritime pursuits, either as a distinct industry or combined with agriculture. The principal localities in which fishing is carried on do not usually present conditions favourable to husbandry. They are limited in extent and fertility and are subject to certain climatic disadvantages. The prolific nature of the adjacent waters and the convenience of their undisturbed use, are a necessary compensation for defects of soil and climate. On such ground alone the sea and inland fisheries to which British subjects have claims on this continent, are of peculiar value, and as regards particular sections of the country, the benefit of sole privilege of fishing are practically speaking an almost vital necessity.

Whether, therefore, we regard them as being abundant and important for domestic subsistence, or in their much larger import as a valuable resource, capable of ever increasing development and limitless reproduction, employing an amount of capital reckoned by many millions of dollars, and engaging the labour of hundreds of thousands of persons,—encouraging maritime pursuits, fostering the commercial marine, promoting foreign trade, keeping always and productively in active training an independent spirited class of sea-faring men,—the teeming waters around the coast of the British North American possessions, and those which form their great lakes and magnificent rivers, present to our view a national property richer and more perpetual than any mere monied estimation could express.

It is in the highest degree gratifying to find that British subjects are becoming every year more and more alive to their vast importance, and that Canadians especially are now more than ever anxious to preserve them as the finest material portion of our colonial heritage.

The fact of foreign nations having always clung with such tenacity to every right and common liberty which they have been enabled to secure in these fisheries,

and the eagerness which foreigners manifest to establish themselves in the actual use of such extensive and lucrative privileges, constitute the best extrinsic evidence of the wide spreading influence of their possession and the strongest testimony to their industrial and commercial worth.

I have the honour to be, sir,

Your obedient servant,

F. GOURDEAU,

Deputy Minister of Marine and Fisheries.

SPECIAL REPORTS

ON

- I.—The Fisheries of Canada.
- II.—On the Treatment and Planting of Salmonoid Fry.
- III.—The Propagation of Black Bass.

BY

PROFESSOR E. E. PRINCE, B.A., F.L.S.

Commissioner of Fisheries for Canada,

1897

I.

THE FISHERIES OF CANADA.

BY PROFESSOR EDWARD E. PRINCE, DOMINION COMMISSIONER OF
FISHERIES, OTTAWA.

Last year I had the honour of being invited by the Royal Society of Canada to deliver the annual evening address at their May meeting. It is not customary to put in permanent form a popular address of that nature; but when asked this year to contribute a short article on fisheries to the "Handbook of Canada," prepared for the British Association for the Advancement of Science, which held its sixty-sixth meeting in Toronto, I summarized my notes for the purpose, in the form of a *résumé*.

The present account is based upon the Royal Society address and the *résumé*, referred to. The time appears opportune for publishing this sketch, as there is no work available, which attempts an adequate review of Canada's fishery resources, fishery administration, &c. There are, it is true, accounts by Jones, Lemoine and others, and works upon provincial fisheries by Perley, Knight and lesser known writers, but the great fisheries of the west have received very inadequate treatment as compared with those of the east, and a summarized sketch of the whole subject is now essayed, it is believed, for the first time.

That the fisheries of Canada are the most vast in extent and the most varied in their products, can hardly be questioned. The Dominion's waters on the Pacific and Atlantic shores teem with fish of the greatest economic value, while the system of fresh water lakes, really inland seas, which stretch in a linear direction for over a thousand miles; the productive lakelets, countless in number, and the noble rivers which flow through her far-reaching territory, provide the amplest field for gigantic fishing industries.

The annual value of the inland and sea fisheries has been variously estimated; but it cannot be much below \$30,000,000. Official returns, it is generally admitted, underestimate rather than overestimate their total value, as vast quantities of fish are used for food which it is hardly possible to accurately estimate, and enormous catches are made in remote regions of Canada of which no returns are available. Fishermen generally exhibit an unwillingness to state with any precision the amount and value of their takes each season; and shipments of fish are frequently taken from Canadian fishermen by United States tugs, especially upon the great lakes, which are not entered upon Dominion records.

The growth of the fisheries has been phenomenal. In 1850 their value did not exceed \$150,000; in 1852 the value was doubled, and in 1859 it rose to \$1,407,000, while ten years later (1869) it amounted to \$4,376,526. By 1872 the value again more than doubled, and reached \$9,570,116. In 1877 it was \$12,005,944; in 1887, \$18,386,103, and official estimates this year put it at \$20,407,424, which do not probably adequately account for the value of fish consumed by the Indians, the Eskimo, and settlers in remote districts of the Dominion, or the large quantities shipped from Hudson Bay, Hudson Strait and other distant waters.

An army of fishermen, 75,237 in number, possessing boats, nets and gear valued at about \$10,000,000 engage in these fisheries. Many profitable industries are largely connected with and dependent upon the fisheries, such as boat building, net and twine manufactures, the making of cans (for salmon, &c.) some of these industries being extensive. The following summary, suggested by the system of territorial regions which Sir William Dawson laid down in his work on the "Ice Age," recognizes seven great divisions, each characterized by fisheries more or less distinctive.

REGIONAL DIVISIONS.

(1.) The Atlantic division, from the Bay of Fundy to the coast of Labrador, embracing deep-sea and inshore fisheries, cod, mackerel, haddock, halibut, herring, hake, lobsters, oyster, seal and white whale (Beluga) fisheries. Annual value: \$10,000,000.

(2.) The Estuarine and inland waters of the Maritime Provinces (Nova Scotia, New Brunswick, Prince Edward Island and Quebec), including fisheries for salmon, shad, gaspereaux (alewife), striped bass, smelt, and in the lakes, ouananiche or fresh water salmon, lake trout or lunge, maskinonge, &c., of the annual value of \$2,500,000.

(3.) The great lakes and tributary waters: Lake whitefish, great lake trout, lesser whitefish (called erroneously lake herring), sturgeon, pike-perch, (doré or pickerel), black bass, brook-trout, maskinonge, pike and numerous carps, suckers and catfish. Value: \$2,000,000.

(4.) Great North-west lakes, including Manitoba and northern waters, yielding lake whitefish, sturgeon, pike-perch, tullibee (a peculiar lesser whitefish), pike and gold-eye (a true fresh-water herring).

Value, including newly developed "caviare" and "sturgeon sounds" industries, \$1,000,000.

(5.) Pacific interior, or Rocky Mountain plateau, comprising little developed fisheries, land-locked Pacific salmon, lake whitefish, lake trout, river trout and numerous *cyprinoids*, none of which are probably identical with eastern species. Annual value small and unrecorded.

(6.) Pacific coast fisheries which are almost unworked, if the estuarine salmon fisheries be excepted. At least seven different species of Pacific salmon occur belonging to the genus *Oncorhynchus*, excluding *Salmo gairdneri*, the steelhead. Halibut, skill (black cod), oolachan (candle fish), anchovy, herring, smelt, and a great variety of other marketable fishes abound, but are not to any adequate extent utilized. Shark, dog-fish and whale fisheries exist, and there are limited oyster fisheries. Exclusive of the fur seal, which is an oceanic industry, less than \$1,000,000 in value, the coast fisheries may be given at \$4,000,000.

(7.) Hudson's Bay and Peri-Arctic area (Ungava Bay to the Mackenzie River), Whale, walrus, sea-trout, the inconnu, resembling a huge river whitefish, pike, suckers, sturgeon, and possibly salmon and cod, occur in these vast waters, of which Hudson Bay alone exceeds the Mediterranean Sea in extent. The richest whaling grounds in the world are in this little-known part of Canada, off the mouth of Mackenzie River and as far east as Cape Chudleigh, in Hudson Strait, where the Baleen whale and walrus were until recently numerous. "The tidal channels of Canada's Arctic archipelago are destined," it has been truly said "to be the last home of the leviathans, which within the memory of living men, have been driven from Newfoundland latitudes to the places where their survivors have now sought retreat."

COAST LINE, LAKE AREAS, &C.

It may be pointed out that the waters grouped in this seven-fold manner include on the Atlantic, a Canadian coast line at least 10,000 miles long, and on the Pacific not less than 8,000 miles, while the portions of the great lakes (Superior, Huron, Erie and Ontario), which lie within the British boundary line, embrace a fishing area computed at 72,700 square miles, and containing one-half the fresh water upon the surface of the globe. To these extensive waters must be added giant streams like the St. Lawrence, the largest river on the North American continent, having a drainage area of 367,000 square miles, the Mackenzie River (over 2,000 miles long), the Saskatchewan (2,000 miles long), the Fraser and Red Rivers, each 600 miles long, and others, like the rivers Peace, Nelson, Albany, Great Whale, Skeena, Ottawa, St. John, Restigouche and Miramichi, all of which are great rivers abounding in the choicest species of fish.

There are few rivers or lakes in this vast continental stretch, which do not furnish to the angler fishing with rod and line unapproachable elsewhere. The

salmon rivers of the maritime provinces have no equal, and the inland waters inhabited in the east mainly by speckled trout; and further west, especially in Ontario, by black bass and maskinongé, afford the highest kind of sport. The large trout of the Nepigon River and Lake Nepigon in western Ontario have a reputation hardly inferior to the ouananiche or fresh-water salmon of Lake St. John, in the province of Quebec.

The principal salmon streams of New Brunswick and Quebec, such as the famous Restigouche, the peerless Miramichi, the St. John and its tributaries, the Nipissiquit, the Cascapedia, the Saguenay, &c., are for the most part leased by clubs or private parties, many of them from the United States, and their commodious club-houses occur at picturesque points along the banks. Such is the value placed upon angling in some of these waters that the Cascapedia, which may be cited as an example, was leased not long ago by the Quebec Provincial Government at no less a sum than \$6,125 per annum. While angling for trout and other fish, excepting salmon, has in the past been freely permitted in the various provinces, the necessity with the increase of sportsmen and the leasing of lakes and rivers has arisen for effective restrictions. In Ontario, for example, no one except resident Canadians can angle for bass, maskinonge, trout, &c., without a permit which is issued at a moderate fee. The Commissioner of Crown Lands, Toronto, has power to issue free permits for one month for waters adjacent to Crown lands, and visitors who are domiciled for a time in Canada may have the privilege of fishing without permit or license. In waters so numerous and extensive as those of Canada the angler has no difficulty in finding scope for his *penchant*, and such resorts as the Thousand Islands attract myriads of sportsmen every season. In each province indeed there are localities which abound in game fish where the angler can freely exercise his skill.

In the tidal portions of rivers licenses and leases are granted by the Department of Marine and Fisheries for commercial fishing, and in the estuary of such rivers as the Restigouche and Miramichi, most extensive salmon netting for the market is carried on. In the harbour of St. John the net fishings are under the control of the city of St. John, but elsewhere the Dominion Government possesses the leasing or licensing power. As already stated, the provincial governments have the right to issue leases for non-tidal portions in the case of ungranted frontages; but this power is vested in the riparian proprietors in the case of granted lands. In Nova Scotia and Ontario the waters, as a rule, are not leased, and the riparian owner's rights have not been very generally enforced.

It is important to note that the Atlantic inshore fisheries of Canada, embracing an area of more than 15,000 square miles, are prosecuted not by Canadian fishermen alone, but by those of the United States, Newfoundland and France under international treaties. The great lakes also are, for the most part, divided between the United States and Canada, and the recorded Canadian catches represent therefore only a proportion of the total yield of those waters.

In Hudson Bay and the northern seas, as well as in the Pacific inshore waters of British Columbia, foreign fishermen have very largely encroached on the fishery resources of the Dominion. There are, it may be added, extensive waters as yet untried and undeveloped, and valuable resources which in the near future will add to the annual value of the Canadian fisheries.

The importance of the fishing industries did not in the past go unrecognized. A government department charged with the administration of fishery, as well as shipping matters, was created at Confederation (1867), prior to which the fisheries had been regulated by a branch organized in 1859, of the Crown Lands Department of Upper Canada. Such control as the provincial governments still exercise in Ontario, Quebec, and the other provinces, is carried out by the Commissioners of Crown Lands in the several provinces. Since Confederation the vast fisheries of the Dominion have been under the direct supervision of a Cabinet Minister (the Minister of Marine and Fisheries) at Ottawa. A Deputy Minister acts immediately under the Minister, and has the administration of the department in his hands, while a Commissioner of Fisheries, who is also General Inspector for the Dominion, has important

advisory and executive functions. In addition to the usual inside staff of officers and clerks, there is a body of outside officers who enforce at a yearly cost of about \$120,000, the close seasons, and the fishery license system, collect statistics, &c.

The staff includes 12 inspectors of fisheries (who receive \$700 to \$1,500 per annum): several hundred overseers, vested with magisterial powers for the purposes of the Fisheries Act, (receiving \$100 to \$900): and a still larger body of temporary fishery guardians, whose pay ranges from \$1.50 to \$2 per day. A fleet of armed cruisers, costing about \$100,000 annually, patrol the coastal and great inland waters, exercising surveillance over foreign as well as Canadian fishing operations in Dominion waters. Finally, a bounty system is carried out for encouraging the pursuit of the deep-sea fisheries in the Atlantic, the provision for which was secured by the Halifax Award, (November 23, 1877), whereby a sum of \$5,500,000 was paid by the United States in consideration of the fishery concessions in Canadian inshore waters along the Atlantic coast granted to the United States fishermen. A sum of \$160,000, voted annually by Parliament is by this means available, and is distributed amongst the deep-sea fishermen in the Maritime Provinces. The work of the Fisheries Department is thus extremely varied and important. The late Professor Brown Goode, United States Commissioner of Fisheries, at a fisheries conference in London, 1883, said:—"It seemed to him that the Canadian Department of Marine and Fisheries was one of the most valuable organizations in the world, and that the system of gathering statistics was one which other countries ought to study with a great deal of care. In the United States they had nothing of the kind." The collection and publication of statistics is indeed an invaluable branch of the department's work.

The methods of protection and restoration adopted by the Department of Marine and Fisheries are:—

- (1) Close seasons preventing the capture of spawning fish.
- (2) Fishing licenses specifying the kind of net, amount, mesh, &c.
- (3) Prohibition of obstructions, pollutions, &c.
- (4) Protection of spawning grounds, spawn, immature fish, &c.
- (5) Artificial fish culture, as a means of supplementing natural reproduction and introducing fish into new waters.

The last is carried on by means of 14 hatcheries under the supervision of the Commissioner of Fisheries. Salmon (Atlantic and Pacific), great lake trout, and lake whitefish, are hatched and shipped *gratis*, if the waters applied for are suitable. A lobster hatchery at Pictou, N.S., turns out annually one hundred to one hundred and sixty millions of minute larval lobsters. The fish culture operations cost between \$30,000 to \$40,000 per annum, and in 1895, close upon three hundred millions of fry of the various fishes above named were planted in the several provinces.

A most effective aid to the protection of fish is the prohibition of obstructions caused either by dams or by nets and other fishing apparatus. Main channels of rivers may not be obstructed, and the law requires that nets or fishing apparatus shall leave two thirds of the course of any river or stream clear for the ascent of fish. It is required that fish-passes shall be provided by mill owners or others to enable fish to ascend above dams or barriers and such fish-ways must be kept in efficient condition. In special cases the department is empowered to provide one-half of the cost if the Minister of Marine and Fisheries judges it to be called for. A special provision of the Fisheries Act requires that fish shall not be impeded in their migrations on Sunday, and all nets, fish traps, &c., must therefore be taken out of water, or raised or opened to allow of free passage. In British Columbia for 36 hours each week fishing is prohibited in order to allow of the ascent regularly of a certain proportion of every week's run of salmon.

A sea-fisheries Intelligence Bureau established in 1889, including between fifty and sixty stations under the charge of the Commander of the Protection Fleet, announces daily to the fishermen the movements of fish and the localities for bait.

The following table shows in graduated series the various fish and fish products with the relative value of each for the years 1895 and 1896.

Number.	Kinds of Fish.	1895.		1896.	
		Quantity.	Value.	Quantity.	Value.
			\$		\$
1	Cod, dried..... Cwt.	806,415	3,630,279	809,608	3,610,935
2	do tongues and sounds..... Brls.	824	8,240	845	8,450
3	Salmon, preserved, in cans..... Lbs.	28,858,897	2,886,479	29,872,740	2,988,258
4	do fresh..... "	4,872,770	794,964	5,439,942	965,029
5	do pickled..... Brls.	3,825	42,312	3,186	36,498
6	do smoked..... Lbs.	56,460	8,962	49,133	11,894
7	Herring, salted..... Brls.	511,470	2,301,616	490,171	2,183,559
8	do fresh..... Lbs.	11,556,085	295,705	22,289,796	504,893
9	do smoked..... "	10,051,613	203,235	10,980,430	221,292
10	Mackerel, salted..... Brls.	35,554	497,756	37,765	528,710
11	do fresh..... Lbs.	2,068,236	238,899	2,427,972	199,033
12	Lobster, preserved in cans..... "	12,345,592	1,666,388	10,906,638	1,526,928
13	do alive or fresh..... Tons.	7,374	543,708	8,988	678,834
14	Hake, dried..... Cwt.	73,424	186,890	94,808	241,687
15	do sounds..... Lbs.	47,931	23,966	69,867	34,933
16	Haddock, dried..... Cwt.	120,758	422,653	125,122	421,204
17	do smoked (finan haddies)..... Lbs.	231,000	22,050	1,116,000	72,180
18	Pollock, dried..... Cwt.	59,507	148,767	88,781	221,118
19	Trout..... Lbs.	6,926,116	692,189	6,950,986	690,699
20	do..... Brls.	1,040	10,400	2,275	22,750
21	Whitefish..... Lbs.	14,249,399	767,307	13,374,000	773,345
22	Smelts..... "	9,022,157	451,108	9,970,805	498,539
23	Halibut..... "	3,977,350	270,901	3,672,625	253,435
24	Shad..... Brls.	9,639	98,181	8,586	87,370
25	Eels..... Lbs.	909,270	54,556	1,037,535	62,252
26	do..... Brls.	9,984	96,880	7,333	70,690
27	Alewives..... "	48,108	192,432	52,616	209,194
28	Sardines..... "	188,089	377,292	86,981	176,414
29	do preserved..... Cans.	924,000	46,200	576,700	28,835
30	Bass..... Lbs.	1,159,870	85,567	1,294,595	94,442
31	Pickrel..... "	7,678,411	303,296	6,897,810	274,931
32	Pike..... "	3,592,975	103,325	3,594,790	99,008
33	Maskinonge..... "	455,535	27,332	807,950	48,477
34	Sturgeon..... "	1,749,520	155,176	2,403,801	152,757
35	Squid..... Brls.	15,055	60,220	24,500	98,000
36	Flounders..... Lbs.	252,432	12,622	189,159	9,613
37	Winninich..... "	100,000	6,000	90,000	5,400
38	Oysters..... Brls.	47,673	192,292	48,574	194,296
39	Clams..... "	20,022	69,027	19,791	70,960
40	Perch..... Lbs.	1,010,580	29,729	1,333,550	38,840
41	Toni-cod or frost fish..... "	2,910,510	138,525	2,657,465	137,832
42	Oulachons..... "	594,200	30,625	581,500	29,550
43	Coarse and mixed fish..... Brls.	80,850	296,789	104,832	284,639
44	Home consumption not included above..... Lbs.	1,938,230	269,282	1,894,856	287,896
45	Fur seal skins (British Columbia)..... No.	71,359	713,590	55,677	501,093
46	Hair do..... "	16,469	18,753	16,808	19,157
47	Sea otter skins..... "	16	2,000	23	4,025
48	Beluga (white whale) skins..... "	205	820	222	5,328
49	Fish oils..... Galls.	620,613	248,246	557,140	224,633
50	do used as bait..... Brls.	234,696	352,047	256,146	384,219
51	do do manure..... "	105,209	52,605	127,658	63,830
52	do guano..... Tons.	3,615	51,155	3,416	49,540
Total.....			20,199,338		20,407,424
Total increase.....					208,086

METHODS OF FISHING.

At least a dozen methods of taking fish for the markets merit, on account of their importance, a passing notice. The two chief methods are the pound-nets or fish-traps, and the gill-nets or drift-nets. The latter (gill-nets) hang like a wall in the water, with weights, suspended by lines and buoys or floats, and the fish, in their endeavours to pass through, become meshed by the head and strangled. The former (pound-nets or weirs) consists of a "leader" which obstructs the fish and leads them into a staked inclosure, out of which on account of the arrangement of partitions they do not readily escape. Pounds of wickerwork or brush are used in New Brunswick and Nova Scotia for taking sardines, herring and mackerel. Swing nets and other forms of stake-nets are used for salmon, &c., and instead of impounding they gill the fish, but the hoop-nets (or verveux) are perhaps the most widely used for taking the inferior kinds of fish, catfish, suckers (cyprinoids), perch and the like. The hoop-net has the form of a funnel held open by a series of erect wooden hoops and set in creeks and inshore waters. A special form of trap or weir is used for taking eels.

The seine is a most effective net, but on account of its destructive nature, its use has been discouraged. To the extensive use of seines in former years may be attributed the serious decline in some localities of once prolific fisheries. Scoop-nets and bag-nets are used for taking smelts, striped bass and shad. They are successfully used through the ice, in winter, taking immense quantities of fish, carried in with the tide, as the smelt, or when lying torpid like the striped bass, in the winter months.

SALMON AND LOBSTER CANNING.

The vast salmon and lobster canning industries of Canada (salmon on the Pacific coast, and lobsters on the Atlantic coast) are in some respects the most remarkable fishery enterprises in the world. Probably nine to ten millions of salmon are annually used in British Columbia, while every year from eighty to one hundred millions of lobsters are packed in the six or seven hundred lobster factories on the coast of New Brunswick, Prince Edward Island, Quebec and Nova Scotia.

OYSTER FISHERIES.

Finally, the oyster, which differs from the European species in being dioecious and in its hundred-fold more prolific character, is distributed over vast areas along the Atlantic coast, constituting these areas most extensive and valuable oyster grounds. The annual yield, 50,000 to 70,000 barrels, represents but a tithe of the possible yield, were systematic culture and judicious fishing methods adopted. The Department of Marine and Fisheries has for six years carried on operations, with the aid of a qualified expert, in order to restore and render more prolific certain important oyster beds.

NOTES ON SOME MARKETABLE AND GAME FISH.

It is necessary to add a few succinct notes upon certain species of fish of prime importance, commercially, or for sport, which are either peculiar to the waters of this continent or closely allied to European species. The cod, haddock, halibut, mackerel, herring, salmon, pike-perch or doré (also called pickerel), the pike, smelt, eel, and other kinds, call for no special reference, but others like the whitefish, striped bass, &c., demand a brief notice.

Whitefish. *Coregonus clupeiformis* (Mitchill). This fresh water salmonoid is allied to the European Gwyniad and Pollan. It varies in weight from 2 pounds to 16 pounds, and is deep in the body, the shoulder abruptly descending to the head which is very small, the jaws are toothless, the snout blunt, and the gape contracted. The large silvery scales upon its sides, or as some think, the whiteness of the flesh have gained for it its distinctive name. No fish is more justly esteemed for table purposes,

and to explorers and Indians it is invaluable because a continuous diet of whitefish, unlike salmon, never palls upon the taste. There are several species which abound in almost all the lakes from the Atlantic to the Pacific, and their capture constitutes one of the most valuable of the fresh-water fisheries, the annual yield being not less than 9,000 or 10,000 tons, or about one-fifth of the yearly take of codfish. The lesser whitefish, called cisco and lake herring, have become valuable in recent years, as the larger species have been considerably depleted. They feed upon insects and small crustaceans, and like the salmonidæ generally, they resort in the fall to their accustomed spawning grounds, traversing, in many cases, great distances to do so.

The speckled trout or brook trout of Canada (*Salvelinus fontinalis*, Mitchell), is more allied to the charrs than to the common river trout (*Salmo fario*, L.), of Europe. Instead of the silvery sides with comparatively large scales, showing minute red and black spots, the Canadian speckled trout has small scales, dusky green back and dorsal fin vividly diversified with yellow vermiform markings, the sides being spotted with red, white and black. The reddish paired fins show a cream-white anterior margin. It is more important for sport than commercially, but its game qualities are inferior to those of the English trout.

The maskinonge (*Esox nobilior*, Le Sueur) bears a general resemblance to the pike (*Esox lucius*, L.), but is in many respects superior. Its edible and game qualities are remarkable, and it often attains a weight of 70 pounds. Whereas the pike is blotched with white on its greenish brown or dusky sides, the maskinonge exhibits brown blotches on a pale ground colour. The branchiostegal rays are 17 to 19 in number, but in the pike 14 to 16. Most of the still waters of Quebec and Ontario contain this fine game fish, but it has greatly decreased in numbers, though splendid fishing is still to be had in lakes Scugog, Rice, Simcoe, and other Ontario waters.

Black Bass (*Micropterus*, Lacep): The two species of black bass rank high in the estimation of the angler. They range from 2 lbs. to 8 lbs., and are bold, strong and gamey. The flesh is firm, white, and of great excellence. The nest-building habits and strong parental instincts of these fish are well known. Striped bass (*Roccus lineatus*, Bloch) occur in the tidal waters along the Atlantic coast. They reach a great size (15 lbs. to 40 lbs.) and afford splendid sport. They are, with the exception of the salmon, the choicest of food fishes, but their destruction when dormant in the rivers in winter, and the taking of the immature young in smelt nets, has seriously depleted them.

Catfishes or Siluroids (*Ameiurus*). A great variety of species occur in the rivers and lakes, and all are characterized by the long feelers which project from the upper and lower jaws. In size they range from 2 or 3 inches, to 4 or 5 feet, and as there is a good demand for them in the United States markets, considerable catfish fisheries have grown up in some localities.

The two Ganoids *Lepidosteus*, (gar-pike) and *Amia*, (Bow-fin or Lake Dog-fish), are fairly plentiful in the lakes and slow streams, especially in Ontario. These fish are interesting as representing the extinct armoured fishes which were abundant in the Devonian and Carboniferous ages. The fossil species were numerous; and their living representatives few. Of the two groups of Ganoids the osseous and the cartilaginous the sturgeon belongs to the latter, and is now of great market value. Most of the sturgeons descend to the sea, but one of them (*Acipenser rubicundus*, Le Sueur) is strictly a fresh water form and ranges from 40 lbs. to 120 lbs. in weight while the giant B. C. sturgeon ranges from 500 to 1,200 lbs weight.

Of the shad and the remarkable salmonoids of the Pacific waters, it is not necessary to add any remarks in this necessarily brief sketch.

Ever since the discovery of this vast western continent the richness and value of the Canadian fisheries have been acknowledged, and though the fishing fleets of Norway, Portugal, Spain, France and England, have for centuries prosecuted commercial fishing in the waters of the Dominion, and the old colonial provinces, the United States and the British provinces have taken from them incalculable quantities of fish food for the markets of the old and new world, they still remain the greatest and most varied fisheries in existence.

II.

ON THE TREATMENT AND PLANTING OF SALMONOID FRY.

By PROFESSOR E. E. PRINCE, DOMINION COMMISSIONER OF FISHERIES, OTTAWA.

In the report of this department for 1895, I published some notes on the culture of trout. My remarks had reference mainly to the procuring of eggs, the process of fertilization, and the management of the ova during incubation. These notes appear to have aroused widespread interest, and in consequence of their publication a large number of attempts have been made by private parties to commence fish-culture, especially the culture of speckled trout or brook trout. From the number of communications which have reached the Department of Marine and Fisheries upon the hatching and rearing of trout, the hope which I ventured to express has been fully realized when I said "there is evidence of a growing desire in various provinces on the part of enthusiastic individuals to pursue private fish-culture, and to second and to support the efforts of the Department of Marine and Fisheries in recuperating various waters in the Dominion."

It is true that in some concluding paragraphs in the report alluded to, I pointed out some of the conditions necessary, not only for the successful incubation of the eggs of the trout, but also for the rearing of the newly hatched fry. I added some details, indeed, respecting the building of ponds, and the steps desirable to guard against enemies of hurtful influences, in short, I pointed out the precautions required in order to ensure the best results.

The four main considerations for success in planting fry are:

(1) The best age at which fry could be planted in order to ensure the largest results.

(2) The season and climatic conditions best for transport.

(3) The places to be selected for planting.

(4) The precautions necessary to be observed when the fry are in transit.

When the hatching of eggs is carried on upon an extensive scale it is very necessary to commence the work of distribution with as little delay as possible. The advent of warm weather brings many dangers which are avoided by planting in the early and colder days.

Newly hatched fish carry on their under side a large bag of food-yolk upon which they feed by a process of absorption. There is danger in handling fry when the sac is large as the delicate envelope or skin outside is very tender, easily abrades and ruptures, causing the death of the fish. It is wise therefore to allow them to remain in the hatching troughs for 10 or 20 days, by which time the yolk-ball has much diminished and the fish are more hardy and robust. There is of course danger from various causes of losing a large proportion of the fry of whitefish, salmon, and trout if they are retained long after the absorption of the yolk sac. Fungus, which may also attack eggs during incubation, is one of the most pernicious. What is called "dropsy" in the yolk-sac is not common, inflammation or clogging of the gills is frequent, but fungus is an epidemic that often carries off entire batches of eggs and fry.

The commonest remedy is common salt, of which a saturated solution is made, practically strong brine, and this is poured into the tanks containing the infected fish. It is a good plan to turn off the supply tap so as to leave 2 or 3 inches of water in the tank, and it is easy then to convert the contained water into a fluid not quite the strength of sea-water. It must be thoroughly mixed and the fry left in for about half an hour. Usually the bath has no ill effect; but if the fry appear to be becoming weak or discomforted, the fresh water should be turned on again. A bath of this kind has been found beneficial, though it requires care, as young salmon

immersed in sea-water too long die from hardening of the yolk-sac, which becomes dense like india-rubber. Recently another remedy has been advocated, viz., permanganate of potash, which sweetens the water and destroys organic germs. The *Revue Scientifique* notes that at the Geneva Exhibition, 1896, permanganate of potash was used to clean the aquarium, and it is claimed that it prevented the specimens of the salmonidæ from being attacked by *Saprolegnia*. It is a matter, however, of experiment as yet, and further trials are necessary to establish its success.

One recent experimenter tried a new method and with a small painter's brush or the thumb and finger, removed the fungus, and then with a solution of 18 grs. of bichloride of mercury diluted in a 6 oz. bottle, he applied with a camel-hair brush this solution over the parts affected, holding the fish a few seconds before returning them to the water, which was changed daily. The result, he states, is that after one application his fish entirely recovered, with but a few exceptions, which however, were cured by a second application.

There has been much controversy respecting the merits of planting small and helpless fry and planting yearlings or fingerlings, which have been kept in ponds and fed on artificial food. It is admitted that great loss results when fry are thus impounded, and the trouble and expense are serious if a great quantity of fry are being reared. Some of the best pisciculturists (like Mr. F. Francis) have advocated turning the fish out at once *i. e.*, just before or at the time they begin to feed. The strongest argument in favour of this course, apart from the loss by death and the saving of time, money and labour, is that derived from the contention that fry if kept in artificial inclosures and fed become semi-domesticated after a few months and, when liberated amongst their wild companions already in their streams and lakes, fall victims either to starvation (from inexperience in foraging for food), or to predaceous enemies (from which they have been from the hatching stage carefully guarded). Very young salmon and trout attack their weaker brethren and artificially reared "yearlings" certainly do not commence free life on equal terms, with those reared by nature. There is much therefore to be said in favour of using all haste in planting these fry in suitable places after hatching and before the yolk is entirely absorbed. "They do not want any food" said Frank Buckland "for they are supported by the contents of the umbilical vesicle and at this time above all others require protection. You may at this time increase the flow of water, for I have discovered from painful experience, that water which is sufficient for a given number of eggs is not sufficient for the same number of young fish, when they come out of the eggs." It is, however, a fact that young fry frequently take food, and swallow small particles before the yolk sac has been entirely absorbed. As a rule the yolk has gone before the 35th or 40th day after hatching. If the yolk sac is half-absorbed, say on the 20th day, the fry may be safely planted. They have sufficient food to last them until they are thoroughly accustomed to their natural surroundings, and are able to shift for themselves.

The cool and favourable weather of April, May or early June, unless the season be later than usual, is adapted for distribution, and the risks of loss at that time from long or tedious journeys is reduced. Such long and perilous trips are as far as possible to be avoided; but they are often necessary in order to reach the shallow upper waters which are most suitable for planting the young fry.

The question has often been discussed whether fry whose incubation has been protracted are stronger than those which have been hatched earlier under a higher temperature. Certainly the mortality in broods of English trout hatched in water below 40° F. is far less than when the water is of a higher temperature. The same has been found to be true of the Canadian speckled trout and the Rainbow trout.

In a series of ova which had reached an advanced stage in water of 48° F., and were then placed in trays supplied with water 10° lower, the hatching out did not take place until the 120th day, though they are known to hatch in 50 or 60 days under a higher temperature. The resulting fry are more robust, and fewer die during the early stages after liberation from the egg than in those hatched at a tem-

perature of 48° to 60°. Actual tests on spawning beds have shown that for long periods the water may not rise above 34° or 35° until April, and the period of hatching is therefore prolonged to 150 or 160 days, with the result that the fry are stronger and more healthy.

In accordance with the conditions which obtain in nature, the fry, after exclusion from the egg, should not be subjected to very low temperatures, but water ranging from 45° to 55° is most suitable. The carrying of fry to the localities where they are to be deposited is an important matter. Railway journeys, if not too protracted, do little harm to fry, unless the cans or tanks holding them are kept too near a stove or hot coils. Excessive heat often proves fatal in railway cars, but as a rule, journeys by rail are less perilous than by team over rough roads, when the shocks and collisions seriously disarrange the delicate organization of the young fry, and damage it is believed the sensitive otocysts of the little fish. Team-drives over rough trails through forests are not conducive to the well-being of fry, and when possible, cans should be carried, in the matter described later, over very rocky or uneven tracts. Conveyance by boat or canoe is by far the best mode. Cans specially contrived for the purpose are best, and should be made of heavy galvanized iron* or stout iron well tinned, and holding 10 to 12 gallons of water. They may be 24 or 26 inches high, and say 18 inches in diameter, but may be of the form of a truncated cone, with a narrow neck in the centre for the purpose of preventing the splashing and loss of water as far as possible. Into the neck (say 6 inches in diameter), a cylindrical can fits, the bottom of which is made of fine metal gauze. The gauze not only allows of aëration, but when necessary serves as a receptacle for pieces of ice, which, melting, trickles into the water below in which the fish are swimming about. The ice is often broken up into fine pieces or crushed, if it does not melt and cool the water properly. It should always be remembered that the young of fishes, above all salmonoid fishes, cannot endure heat, nor are they able to withstand frost with impunity. Indeed, ice placed in the lid of the can or tank has proved harmful when on warm days the fry have been surrounded for some hours by water of 50° or 60°. Hence the advisability of transporting young fish either in the early spring months or during the night, and at early morning when the season is warmer and more advanced. At such times they can be most safely shipped.

It is well known that newly hatched fish are far less hardy than eggs. But even eggs during the first few weeks are very sensitive, and within three weeks after fertilization they should be subjected as little as possible to concussions and rough usage. Salmon eggs 22 days old died in 8 or 9 days after being roughly handled during some experiments by the late Dr. Francis Day, the well known British salmon authority, but after the 47th day only very hurtful causes, such as chemical impurities, &c., will do them any harm, and "eyed" eggs are hardy in the extreme. No doubt vast numbers of ova are lost every year at the head waters of salmon rivers by being frozen. Certainly in 1881 this loss was very severe on many Scottish rivers. The famous physiologist, Dr. Davy, brother of Sir Humphrey Davy, imbedded salmon eggs in ice, and found that they survived; but his experiments provided conditions probably more gradual than the severe and trying circumstances of freezing near the source of a river.

In order to keep the cans suitably cool an outside jacket of iron is often provided, separated by an empty space from the inside can containing the fry. Such double cans are very effective, and being much cooler than ordinary cans the fry are shipped in them with much greater safety and success. Whitefish fry which are very small and delicate will to the number of 15,000 to 25,000, travel in one of these cans without loss if the journey be not long and trying; but half that quantity of brook trout and salmon would as a rule suffice. Some authorities favour the wise principle of putting a minimum quantity of fry in each can and regard 3,000 to 5,000 as ample, but with newly hatched fry before the gills are properly developed,

* While galvanized iron is the best material, it must be remembered that the spirits of salt, used in soldering is very hurtful, and new cans, should stand full of water (often renewed) for eight or nine weeks.

and before they have acquired their full larval activity and vigour a greater number can be safely shipped in each can. Ten cans is a full shipment for one team, and fewer cans are in most cases advisable. At the famous Howietoun fish-ponds in Scotland, the lamented Sir James Gibson Maitland, whose recent death all interested in fish-culture must deplore, used a conical form of can 24 inches in diameter across the bottom, and $4\frac{1}{2}$ inches in diameter at the top. The height of this can is 32 inches and the weight, when filled, about 170 pounds, so that two men could easily lift it about by means of two strong handles fixed at points a little above the centre of gravity (about 14 inches from the bottom). When it is necessary to convey the cans along forest paths or across rocky hills, two poles are horizontally attached to the handles, and the can is then easily carried—one man walking in front and the other behind. Many Scottish lakes situated on the highest altitudes have been successfully stocked by this method.

All fry should be planted immediately after arrival. If the hour of arrival at the planting ground be midnight or during the small hours of the morning so much the better, the atmosphere is then cool. In any case no time should be lost as every moment is of importance, and the sooner the fry are disporting themselves in the clear waters of the stream or creek the greater is the assurance of success. Under no plea whatever should fry be kept in the cans over the night. Great risk is run by a few hours' delay. If through the impossibility of obtaining a team or other cause it is absolutely impracticable to at once plant them they should be constantly watched and fresh water splashed in, or the water aerated by a bellows or other means. Aeration is most easily and effectively done by lifting up water in a dipper from the can and letting it fall again with a splash: but on no account should the device be adopted by blowing down a tube into the can with a view to aerating the water. Such an absurd plan has been actually adopted by some manipulators: but in blowing down poisonous air from the lungs, the water in the can already vitiated with carbonic acid gas, becomes more vitiated and poisonous. The surest way of killing and asphyxiating fish suffering from lack of oxygen is to blow air from the mouth into their midst.

Again, fry should not be unduly knocked about or the cans roughly handled. "Fry will not stand much knocking about," wrote the late Sir Gibson Maitlandthe bottom of a tank (or can) used for transporting fry should be stiffened by cross pieces soldered underneath, as, if it sags at all, the fry soon get fatigued, possibly because the least spring from the bottom frightens them and they exhaust their strength by frequent and aimless sallies through the water." The same author also wrote, "With care fry can be carried for twenty-four hours: but the result is not satisfactory if the journey be longer."

Of course small quantities of fry can be sent further and more easily than large. The re-aeration of the water is a difficulty. It cannot be done automatically, as is the case with yearlings, because the motion the water acquires tires out the fry. In fact, the object of filling the tank well in to the cone of zinc is to check the motion."

It usually suffices in a long journey to change the water at appropriate intervals. The fact is well known that little salmon and trout, only 2 or 3 weeks old, actively wave their pectoral fins to and fro and thus create a current of water which aids in oxygenation, and facilitates the breathing operations of the fish.

The actual planting of the fry is a most important matter, and a good deal of very inappropriate advice has been published upon this matter.

It is clear that fry should not be suddenly transferred from a warm can to a can of water that is several degrees higher in temperature than the lake or stream.

The temperature should be somewhat equalized by mingling the two waters before the fish are emptied out. The temperature of the water into which the fry are to be transferred should not be more than 6° higher or lower than the water in which they have been carried from the hatchery.

It is hardly necessary to say that if fry are being sent some distance to be planted, it is an advantage to have all arrangements for their reception made before hand, so that teams may be waiting the arrival of the cans and an immediate start be made. Before placing the cans on the team it is advisable to remove the ice from

the covers of the cans unless the outside atmosphere be very warm. Cans of fish should never stand in the hot rays of the sun: but a cover or sheet should be so placed as to shield them. Cans should also be thoroughly rinsed and cooled with water before fry are placed in them. Fish frequently become sick before leaving the hatchery because this rule has not been observed and the fry placed in cans which have been warmed by the sun or nearness to a stove.

It is a good principle to find out where the fish naturally spawn in the waters to be planted, or if no fish of the same species occur, to ascertain where the best natural conditions exist. Thus whitefish should always be planted on clean gravelly ground in fairly shallow water, or where reefs of honeycomb rock extend. Brook trout and salmon should be placed near the head of streams or as far up tributaries of large rivers as possible, avoiding, however, those which dry up in summer.

Lake trout do best if distributed over rocky shoals such as are selected by the parent fish. In such places as those specified there is abundance of shelter, and the small fish, as a rule, make at once for niches in the rocks, or the protection of pebbles and stones. As pike, pickerel and other predacious fish are in the spring occupied in spawning, there is less danger from these fish than is commonly supposed, especially as the first-named are then in weedy, marshy localities engaged in depositing their eggs. If sunfish, shiners, small suckers and pike appear to abound, it is best to select some other areas which are free from these destructive pests, or if that is not possible drive these fish away by disturbing the water, sweeping a net over the ground or some such method.

It is often the case that neither time or circumstances will admit of reaching the best and most appropriate localities, and the planting must be done where it is apparent the young fry would not have been under natural conditions found. After much experience with young fry, I am bound to confess that planting fry upon what may not appear the most suitable grounds results in better success than might have been anticipated. The charge often made against officials of merely dumping in the fry at the most convenient rather than the most suitable places is less grave than might be imagined by the inexperienced. A man standing on shore with one foot, encased in a fisherman's boot, in the water, can pour the fry gently into a deep part near the edge, and the fry will immediately seek shelter. A better plan is to gently empty the fry from a boat and the fry disperse before they reach the bottom. For a few minutes the mass of young fish appear to crowd together and then spread themselves and disappear from sight. That they survive and do well admits of no doubt as the remark, already made, applies in this case, viz., that the chief enemies of the young fish are in swampy shallows engaged in depositing their spawn. In thus favouring the planting of fry in deep water where it is a matter of difficulty to plant them in small batches in shallow water, I have the support of the late Sir Gibson Maitland who wrote: "At first we used to place the fry in the shallowest water near the inlet of the ponds; but they were so frightened that they used to be huddled together in masses.....when poured into deep water they instantly disperse, and in a few minutes have spread all over the pond in a lively and inquisitive spirit."

III.

THE PROPAGATION OF BLACK BASS

By PROFESSOR E. E. PRINCE, DOMINION COMMISSIONER OF FISHERIES, OTTAWA.

That there are numberless sheets of water in various parts of the Dominion, which are suitable for black bass, but at present inhabited only by inferior fish or destitute of fish life altogether, admits of no doubt. The combination, in both species of black bass (the small mouth and the large mouth species), of the qualities of a fine game fish and an excellent food fish, renders them especially valuable, and their artificial culture and distribution, is a matter of importance. Their dauntless and hardy nature fits them for planting in new and untried waters, and unlike the timid and defenceless whitefish, they are bold and strong enough to hold their own against perch and pickerel (*doré*), or even the pike, and the more predacious kinds.

In the Government hatcheries, carried on under this department, black bass have not been hatched, nor are they suitable for the usual methods of artificial incubation in trays or in glass jars. In last year's Departmental Report (Appendix No. 1), in a somewhat exhaustive though condensed account of fishes' eggs, I referred to the ova of the black bass as not very favourable for artificial culture as they belong to that class of eggs provided with a soft mucilaginous coat, by means of which they are held together in tenacious masses. I referred to the fact (p. 24 of the same article) that they "are generally placed in a nest of more or less perfect construction. They become attached by this viscid envelope of jelly to pebbles, twigs and weeds, of which a kind of nest is usually constructed by the parent fish."

Eggs of this type, as I pointed out in the account referred to, are most unsatisfactory for treatment by the methods of artificial incubation. Only a small proportion of such eggs can be reared by the exercise of considerable care and trouble, and the results are altogether inferior to those secured when non-adhesive individually separate eggs, like those of the trout or whitefish are selected. The reason of this serious failure is complex and arises from several causes, such as the difficulty of obtaining ripe spawn, the peculiar nature of the eggs, which prevents perfect aeration, the evil of foul decaying matter, which finds lodgment in the egg-masses, and the contagion of adjacent dead eggs. Such eggs offer great facility for the germination of parasites and deadly fungi. The difficulties, referred to, were pointed out ten years ago by the late Professor J. A. Ryder, and in speaking of adhesive eggs, such as those of the black bass, he said "it is difficult to prevent the lodgment and rapidly fatal germination of the spores of *Saprolegnia* or *Achyla*, i.e., aquatic fungi or moulds, found in all fresh waters upon dead as well as living eggs. So rapidly do these fungi grow that in a very short time their ravages will extend over an entire tray of adhesive eggs. The eggs are destroyed by the fungus sending filaments into their substance, while the mesh of the mycelium also affords lodgment for dirt, so that the two together effectually shut off the possibility of oxygenating the ova, so that they are smothered."

In my earliest experience with the methods of fish culture, the fact was forcibly impressed upon me that the eggs which adhered in masses, like the eggs of the marine herring (*Clupea harengus*), the lumpfish (*Cyclopterus lumpus*), and other species, a considerable percentage failed to survive the necessary period of incubation, and as the dead eggs could not be torn out from the mass without injury to the attached healthy eggs, the adjacent eggs became fatally affected, and putrefaction spread through the whole mass.

By Professor Reighard's ingenious starch method the kinds represented by the adhesive pickerel's (or *dore's*) egg can be successfully handled and a larger percentage incubated than by any other method: but such eggs as those of the black bass are specially difficult to treat by any of these methods. The female bass even when in a ripe condition is able to retain her eggs by strong muscular effort, so that they do not flow freely when the hand of the fish culturist is gently pressed along the

underside of the body. In many fishes it is impossible for the female to retain the eggs, when they are fully ripe, especially if pressure be applied: but in the case of the female black bass the case is entirely different. The male, too, presents a similar difficulty, and whereas a male salmon, or trout or whitefish, when ripe, is easily handled, and a supply of sperms or milt readily obtained, the male black bass is very obstinate in this respect.

Indeed some authorities state that the only reliable method is to secure the parent fish of both sexes, at the spawning time, and after killing them to remove the ripe eggs and milt from each. It is often found that specimens of male and female bass when obtained are not ripe at the same time, and disturbing them often prevents the process of spawning, so that the ripe reproductive elements are not discharged. No doubt great losses occur in some waters, especially in shallow creeks, which become partially or wholly dry in the months of June and July and later. These are precisely the months which are the most important in regard to the supply of black bass, for the eggs are then undergoing incubation and the fry are hatching out.

A plan was adopted some years ago by the State of Wisconsin for saving these imperilled ova and young fish, and in the report of the Fish Commissioners for the year 1893-4, they give the following details of the steps which they took:—

"The commissioners became satisfied in the summer of 1893 that great benefit would result to the state by the saving of the bass fry in the sloughs of the Mississippi River. That river overflows its banks in times of floods, forming shallow lakes and sloughs along the banks and on the islands. Into this shallow water the bass go to deposit their eggs. On the subsidence of the waters the parent fish return to the channel waters. The eggs hatch by the millions and the young fish are left to perish, either by the sloughs drying up in summer or freezing in winter. Mr. Nevin made careful examination, and after correspondence with Hon. Marshall McDonald, the United States commissioner, the work of rescuing these young fish, depositing the common varieties in the nearest channel waters and saving the bass and pike for distribution to other portions of the state, was begun in the month of September, 1893. The work was new to Mr. Nevin and his assistants when commenced, and experiments in methods were necessary. But it is believed that excellent results will follow this work. Superintendent Nevin, in his report, says: "I regard the rescuing and distribution of fish from these low places along the river, where they would otherwise inevitably perish, as one of the most economical and practical methods of re-stocking our inland lakes. All the fish so planted are adapted to any of the waters of the state; and the cost of taking and planting them is very small compared with the cost of the artificial propagation of the same species, since we now have a fish car for transporting the live fish." Hon. Marshall McDonald, the United States commissioner of fisheries, writes that "in no other way can so valuable results be accomplished from so small an expenditure."

The removal of adult black bass requires special care at the breeding time, as it may happen that the fish have already prepared their nests and placed their eggs therein, or even hatched their young. These young fry if left without parental protection, as a rule, fall a prey to predacious enemies. The Vermont commissioners, in their Fisheries Report for 1888, quote the experience of Mr. C. F. Holt with a batch of these forsaken black bass, who says: "When I went out in the morning the mother fish was gone. I thought I would secure the young fish (they were just hatched), and take them to the house and 'bring them up by hand.' So, putting on my wading boots, I walked out to the bed, and there I found, not the young fry, but three or four crayfish and some minnows, which had evidently devoured every fish on the bed. At another time, under similar circumstances, except that the eggs were not hatched, the crayfish had destroyed all the eggs. I took up every pebble without finding a single one." Although the eggs appear to hatch in about a week or ten days, the transparent and delicate fry are guarded for many weeks. This period of protection lasts from one to two months.

The experiment has been tried of removing the eggs from the nest and artificially rearing the fry, but the difficulty of aeration, as already pointed out, is great, and many eggs are lost from fungus and non-aeration.

The only really feasible modes of black bass propagation by artificial means are the simple methods of (1) transferring adult parent fish, (2) half-grown fish, or (3) small fry after the period of parental protection is over.

Of the transportation and planting of full-grown fish, it is not necessary to say much. Success has attended the transplantation where it has been tried, and the well-known experiments of the Marquis of Exeter, Mr. Alexander Begg, of Victoria, B.C., of Mr. Max von dem Berne, of Berneuchen, and others, have shown that good results can be ensured by such attempts. In Mr. von dem Berne's experiments only three fish survived out of a considerable number, but they produced eggs which yielded, after the male had fertilized them, broods of young, no less than 1,300 in total number. The number of eggs yielded by a single female varies from 2,000 to 10,000.

I quote, from the narrative of Mr. Silk, the details of the Marquis of Exeter's shipment of black bass across the Atlantic:—

"All of the black bass that I brought in 1878 from the United States of America were taken from the Delaware River. I placed them in boxes floating in the stream ready to be taken away. On the day preceding the sailing of the steamer for England they were placed in the tanks I had prepared for them by the river side. We got them to the train without any loss, and on arriving in New York had them placed on the main deck of the steamer; it was then 11 p.m., we having left the Delaware River at 3 p.m. Up to this time I had no loss; my greatest trouble was the high temperature it stood at—78 deg. all night. I kept the water as cool as possible with ice. I stayed by the tanks all night pumping air every few minutes, and keeping people from meddling with them. When daylight came I examined the tanks and found five dead fish, which I removed at once. It was now 5 a.m., and the ship was to sail at 6 a.m. I got some men to assist me in changing the water in the tanks. I had one spare tank, which I filled first, then reduced the temperature from 75 deg. as it came out of the hydrant to 58 deg., then placed the bass in it, and so on until I had given them all fresh water. We sailed at 6 a.m. sharp. When we got out to sea a few miles, I made arrangements with two of the steerage passengers to assist me on the voyage. It was then 9 a.m. I gave them both instructions what to do. After this I arranged with my men to keep watch two hours each, and to relieve each other at meal times. I always took four hours' watch in the night. I then roused one of the men and gave over the fish in good order. If there were any dead I always took them out at once. I made it a point never to go to my cabin at night. We got on very well the first day, as it was cooler, but after this we got into the Gulf Stream; both the air and sea were very hot, the atmosphere 85 deg., and the water in the sea 78 deg. It was during these five days we lost the most fish. We cleared the water every day by straining it through flannel, all thick and dirty water we threw away and added some fresh water made by melting ice. The sixth day out we got into cooler weather, and the fish commenced to do better. The temperature of the atmosphere dropped to 57 deg. We used very little ice unless to make fresh water with. We kept on like this until we reached Liverpool, after ten days' passage. I now got fresh water and changed all the tanks. The fish did not object in the least, but were quite lively. It did not hurt them changing the water from American to British. I got them conveyed to the railway station and placed on a truck. We arrived in Stamford in due course, and on counting the fish I found we had 153. I left the Delaware with 250, so that I had lost 97 fish in twelve days.

In 1879 I went again, and started from America with 1,200 black bass, and on arriving home I had 812, having done better than I did on the previous occasion. All of the black bass were for the Marquis of Exeter, he having borne all the expense of the experiment. Most of the fish were placed in a lake belonging to his lordship called Whitewater, near Stamford. Not any of them have been caught yet. From what I could learn they would be about half-a-pound each in weight, so that they had done very well. The first lot that were put in will be three years old in April, when they are expected to commence breeding."

For merely shipping from one lake or river to another where the distance is

comparatively short it is not necessary to adopt more than the usual precautions observed in shipping any other live fish. It is very advisable that as few as possible adult fish be placed in one tank or barrel, as bass are provided with sharp spines, and are apt to seriously wound each other if too closely confined. Twice as much room should be allowed for bass as for species whose fins are soft-rayed. To transplant bass all that is necessary is to procure the adult parent fish from fishermen or otherwise and transport them alive to the waters to be stocked.

This plan can be readily carried out by arranging with fishermen who are in the habit of netting these fish, telling them to be careful in taking them from their nets without injuring them and placing them in cribs sunk in the water near by until found convenient to transport them to their intended destination; this can be done quite safely if the distance is not too great by putting say 10 or more bass in the ordinary sized water barrels, say 30 or 40 gallons three parts filled with water. If they are to be carried short distances, spring wagons or sleighs may be used, for longer distances shipment by railway.

Numbers of bass have been transported in this way from Belleville on the Bay of Quinté up to the Newcastle Government hatchery, where all of them except those which had been severely injured by the nets arrived safely and large numbers of fry were hatched and reared in the natural way in their circumscribed inclosures or ponds.

With ordinary care and attention given to the netting, cribbing, transporting, and planting of black bass in new waters success is ensured. Little need be said of the transporting and planting of black bass fry. They should be collected soon after the period of parental guardianship and may be netted in schools by means of a fine meshed dip-net, or a seine. Black bass 2 to 4 inches long are very suitable for the purpose, and they attain that size in the fall of their first year. Black bass 5 to 6 inches long are about a year old, but when first hatched they are barely $\frac{3}{4}$ in. in length. In a 15 gallon cask 1000 yearling bass have been shipped a distance of 500 or 600 miles: but the fewer that are placed in each can or cask the more likely is success to be secured. In the late autumn bass can be carried most safely, but many successful cases of transplantation have occurred which took place in July and August. The Department of Marine and Fisheries in 1896 sent a small consignment of black bass to British Columbia from Western Ontario, and a proportion of them arrived on the Pacific coast in good condition, as stated in last year's report. Through an accident and detention in the Rocky Mountains, many of the fish, however, died on the way. Small black bass are very cannibalistic, and those of fairly uniform size only should be placed in the same pond.

On the whole the transference of adult fish is the most practical and successful plan, and 40 or 50 such fish placed in a pond of moderate dimensions will in the course of a few months in summer rear many thousands, 50,000 to 100,000, young fry and thoroughly establish themselves.

APPENDIX No. I.

EXPENDITURE AND REVENUE.

The total expenditure for all Fisheries Services, except Civil Government, for the fiscal year ending 30th June, 1897, amounted to \$443,586.78, being within the appropriation by \$34,025.87.

The total fisheries revenue, during the same period, from rents, license fees, fines and sales, including the *modus vivendi* licenses to United States vessels amounted to \$106,469.55.

Service.	Expenditure	Vote.
	\$ cts.	\$ cts.
Fisheries.....	99,731 64	100,000 00
Fish-breeding.....	27,330 73	40,000 00
Fisheries protection service.....	99,357 41	100,000 00
Fishing bounty.....	154,389 77	160,000 00
Miscellaneous expenditure.....	62,777 30	77,612 65
Total.....	443,586 78	477,612 65

The details will be found in the Auditor General's report under the proper headings.

In addition to the above, the following summary shows the salaries and disbursements of fishery officers in the several provinces, together with the expenses for maintenance of the different fish-breeding establishments throughout the Dominion:

Service.	Expenditure	Vote.
	\$ cts.	\$ cts.
Fisheries, Ontario.....	21,592 40	
do Quebec.....	12,910 80	
do New Brunswick.....	21,671 92	
do Nova Scotia.....	23,682 33	
do Prince Edward Island.....	3,744 36	
do Manitoba.....	1,908 14	
do North-west Territories.....	3,181 58	
do British Columbia.....	8,841 64	
General account.....	2,198 47	
Total.....	99,731 64	100,000 00

SALARIES and Disbursements of Fisheries Officers—*Continued.*

Service.	Expenditure	Vote.
	\$ cts.	\$ cts.
Fish-breeding, Ottawa hatchery	1,107 43	
do Newcastle do	2,812 02	
do Sandwich do	4,854 74	
do Tadoussac do	2,459 27	
do Gaspé do	1,623 30	
do Magog do	451 11	
do Restigouche do	2,525 77	
do Bedford do	1,200 13	
do Bay View do	2,146 85	
do Sydney do	730 09	
do Miramichi do	1,941 01	
do St. John Riv. do	1,781 00	
do Fraser Riv. do	2,840 62	
do Selkirk do	24 79	
General account	832 60	
Total	27,330 73	40,000 00

This expenditure by provinces is subdivided as follows:—

EXPENDITURE.

Ontario.	\$ cts.	\$ cts.
Salaries of officers	14,397 80	
Disbursements of officers	6,707 99	
Miscellaneous	486 61	
Total		21,592 40
Quebec.		
Salaries of officers	8,015 57	
Disbursements of officers	4,693 68	
Miscellaneous	201 55	
Total		12,910 80
New Brunswick.		
Salaries of officers	13,653 13	
Disbursements of officers	7,879 70	
Miscellaneous	139 09	
Total		21,671 92
Nova Scotia.		
Salaries of officers	14,574 93	
Disbursements of officers	8,921 00	
Miscellaneous	186 40	
Total		23,682 33
Prince Edward Island.		
Salaries of officers	2,481 26	
Disbursements of officers	1,157 40	
Miscellaneous	105 70	
Total		3,744 36

EXPENDITURE—Continued.

<i>Manitoba.</i>	\$ cts.	\$ cts.
Salaries of officers	1,323 95	
Disbursements of officers.....	581 89	
Miscellaneous	2 30	
Total		1,908 14
<i>North-west Territories.</i>		
Salaries of officers	1,785 69	
Disbursements of officers.....	1,350 64	
Miscellaneous	45 25	
Total		3,181 58
<i>British Columbia.</i>		
Salaries of officers.....	4,921 47	
Disbursements of officers.....	1,163 12	
Miscellaneous	2,757 05	
Total.....		8,841 64
General account.....		2,198 47
Grand total.....		99,731 64

FISH-BREEDING.

<i>Newcastle Hatchery.</i>	\$ cts.	\$ cts.
Salaries.....	450 00	
Miscellaneous expenditure.....	2,362 02	
Total.....		2,812 02
<i>Sandwich Hatchery.</i>		
Salaries.....	900 00	
Miscellaneous expenditure.....	3,954 74	
Total.....		4,854 74
<i>Ottawa Hatchery.</i>		
Salaries.....	700 00	
Miscellaneous expenditure.....	407 43	
Total		1,107 43
<i>Tadoussac Hatchery.</i>		
Salaries	650 00	
Miscellaneous expenditure.....	1,809 27	
Total.....		2,459 27
<i>Gaspé Hatchery.</i>		
Salaries.....	400 00	
Miscellaneous expenditure.....	1,223 30	
Total.....		1,623 30

MARINE AND FISHERIES.

FISH-BREEDING—Continued.

	\$ cts.	\$ cts.
<i>Magog Hatchery.</i>		
Salaries	253 98	
Miscellaneous expenditure.....	197 13	
Total.....		451 11
<i>Restigouche Hatchery.</i>		
Salaries.....	700 00	
Miscellaneous expenditure.....	1,825 77	
Total		2,525 77
<i>Bedford Hatchery.</i>		
Salaries	450 00	
Miscellaneous expenditure.....	750 13	
Total.		1,200 13
<i>Bay View Hatchery.</i>		
Salaries	450 00	
Miscellaneous expenditure.....	1,696 85	
Total		2,146 85
<i>Sydney Hatchery.</i>		
Salaries	360 00	
Miscellaneous expenditure.....	370 09	
Total.....		730 09
<i>Miramichi Hatchery.</i>		
Salaries	1,000 00	
Miscellaneous expenditure.....	941 01	
Total.....		1,941 01
<i>St. John River Hatchery.</i>		
Salaries.....	600 00	
Miscellaneous expenditure.....	1,181 00	
Total.....		1,781 00
<i>Selkirk Hatchery.</i>		
Miscellaneous expenditure.....		24 79
<i>Fraser River Hatchery.</i>		
Salaries	500 00	
Miscellaneous expenditure.....	2,340 62	
Total.....		2,840 62
<i>General Account.</i>		
Miscellaneous expenditure.....		832 60
Total, Fish-breeding.....		27,330 73
Total salaries and disbursements of fishery officers		99,731 64

MISCELLANEOUS.

MISCELLANEOUS.	\$ cts.	\$ cts.
Building fish-ways	176 46	
Legal and incidental expenses.	3,910 51	
Canadian fisheries exhibits and Ottawa hatchery.	829 29	
Expenditure in connection with the distribution of fishing bounties.	4,997 93	
Surveys of oyster beds	4,359 49	
Str. "Coquitlam"	1,046 02	
International Fisheries Commission.	1,355 82	
Issuing licenses to United States fishing vessels.	479 32	
Behring Sea award	3,388 86	
do commission	30,207 26	
Vessel to replace "Vigilant".	9,991 97	
Newfoundland bait license fees.	267 31	
Fisheries and Yacht Exhibition	389 99	
Investigation charges against government officers	1,243 74	
F. C. Gilchrist.	133 33	
Total		62,777 30

FISHERIES PROTECTION SERVICE—1896-97.

<i>Steamer "Acadia."</i>	\$ cts.	\$ cts.
Wages of officers and men	8,588 09	
Provisions	3,276 79	
Fuel	2,505 95	
Repairs	2,209 82	
Miscellaneous	6,398 09	
Total		23,078 64
<i>Steamer "La Canadienne."</i>		
Wages of officers and men	5,999 50	
Provisions	1,137 02	
Fuel	1,095 59	
Repairs	1,539 87	
Miscellaneous expenditure.	2,285 63	
Total		12,059 54
<i>Steamer "Stanley."</i>		
Wages of officers and men	2,768 63	
Provisions	1,429 47	
Fuel	1,651 63	
Miscellaneous expenditure.	1,079 43	
Total		6,929 16
<i>Steamer "Curlew."</i>		
Wages of officers and men	5,347 57	
Provisions	1,879 89	
Fuel	2,345 82	
Repairs	602 71	
Miscellaneous expenditure.	2,806 50	
Total		12,982 49
<i>Steamer "Petrel."</i>		
Wages of officers and men	6,808 97	
Provisions	1,865 36	
Fuel	1,402 96	
Miscellaneous expenditure.	1,668 27	
Repairs	160 02	
Total		11,905 58

FISHERIES PROTECTION SERVICE, &c.—*Concluded.*

<i>Steamer "Constance."</i>		\$	cts.	\$	cts.
Wages of officers and men.....		6,198	13		
Provisions.....		2,370	67		
Fuel.....		1,533	59		
Repairs.....		1,606	22		
Miscellaneous expenditure.....		2,918	85		
Total.....				14,627	46
<i>Schooner "Vigilant."</i>					
Wages of officers and men.....		985	99		
Provisions.....		616	72		
Fuel.....		22	00		
Repairs.....		11	05		
Miscellaneous expenditure.....		107	76		
Total.....				2,235	52
<i>Schooner "Kingfisher."</i>					
Wages of officers and men.....		4,493	81		
Provisions.....		998	50		
Fuel.....		93	00		
Repairs.....		280	82		
Miscellaneous expenditure.....		1,762	57		
Total.....				8,628	70
<i>Steamer "Dolphin."</i>					
Wages of officers and men.....		2,067	47		
Provisions.....		681	84		
Fuel.....		565	75		
Repairs.....		346	54		
Miscellaneous.....		381	25		
Total.....				4,042	85
<i>Steamer "Aberdeen."</i>					
Wages, &c., officers and men.....		2,264	94		
Provisions.....		372	23		
Miscellaneous.....		503	43		
General account, Fisheries Protection Service—				3,953	60
Wages, &c.....		4,336	65		
Miscellaneous.....		1,368	71		
Fisheries Intelligence Bureau.....				5,705	36
				2,925	82
Total.....				117,443	95
Less—Amount paid by Customs Dept. for Str. "Constance".....		14,627	46		
do do do "Victoria".....		3,459	08		
				18,086	54
Net total.....				99,357	41

STATEMENT of Fisheries Revenue paid to the credit of the Receiver General of Canada,
for the Fiscal Year ended 30th June, 1897.

	\$	cts.
Ontario, rents, license fees, fines, &c.....	32,814	66
Quebec do do	7,876	12
Nova Scotia do do	5,239	55
New Brunswick do do	10,110	77
P.-E. Island do do	2,032	25
Manitoba do do	1,719	00
N. W. Territories do do	344	13
British Columbia do do	39,888	82
	100,025	30
LESS--Refunds	1,140	90
	98,884	40
Licenses to U. S. fishing vessels.....	7,585	15
Total.	106,469	55

COMPARATIVE Statement of Expenditure and Revenue of the

	1885-86.		1886-87.	
	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Ontario	17,900 74	15,917 62	19,534 01	15,063 57
Quebec	13,938 21	2,963 75	14,966 55	3,804 66
New Brunswick	15,719 36	4,078 10	16,944 87	4,417 52
Nova Scotia	17,852 33	2,166 53	18,092 21	1,585 28
Prince Edward Island	3,187 73	40 00	4,044 49	128 00
Manitoba and North-west Territories	1,920 73		2,468 25	5 00
British Columbia	1,878 53	922 50	5,860 72	943 50
Fish-breeding and fish-ways	44,038 80		37,864 22	
Fisheries Protection Service	37,613 30		134,340 12	
Miscellaneous	10,350 43		11,327 77	
Totals	164,400 16	26,088 50	265,443 21	25,947 53
Fishing bounties	161,597 39		160,903 59	

	1891-92.		1892-93.	
	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
General Account Fisheries				
Ontario	15,155 83	25,368 90	20,116 91	30,623 09
Quebec	10,917 36	4,742 76	11,761 34	7,471 70
New Brunswick	15,707 98	6,334 83	15,721 05	7,831 53
Nova Scotia	18,755 86	3,357 42	19,444 22	6,782 02
Prince Edward Island	1,835 65	166 00	2,847 60	304 10
Manitoba	3,593 43	1,079 00	3,932 96	1,661 68
North-west Territories				
British Columbia	6,158 17	8,192 48	5,490 60	40,264 00
Fish-breeding	42,957 74	178 00	47,322 49	
Fisheries Protection Service	93,397 40		106,805 39	
Miscellaneous	17,449 06		100,602 14	
Totals	226,928 48	49,719 39	334,044 70	94,938 12
Fishing bounties	156,892 25		159,752 15	

Fisheries Department, from 1st July, 1885, to 30th June, 1897.

1887-88.		1888-89.		1889-90.		1890-91.	
Expendi- ture.	Revenue.	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.	Expendi- ture.	Revenue.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
19,860 52	18,251 25	19,264 98	24,266 06	14,539 87	23,666 96	15,540 30	26,517 70
13,463 37	5,394 99	12,991 63	3,390 79	9,670 94	5,409 81	10,666 98	3,642 14
20,533 20	7,625 64	20,298 00	8,282 88	14,914 95	8,834 35	16,082 77	7,193 69
18,308 02	3,905 44	20,201 09	2,744 23	17,395 24	5,424 95	17,844 19	5,582 65
3,402 51	.....	3,746 69	140 00	3,113 21	302 88	3,242 25	667 00
2,816 64	819 25	2,848 16	848 00	3,604 70	794 00	3,609 03	1,234 00
3,661 83	6,934 55	4,333 63	6,416 00	3,634 41	11,367 50	4,320 53	12,859 02
41,082 04	.....	41,315 12	352 50	39,126 91	.....	39,496 45	1,286 50
77,102 98	.....	69,693 82	.....	64,434 66	1,176 38	83,050 16	1,934 49
13,498 56	.....	10,912 18	.....	9,313 92	.....	13,382 28	.....
213,729 67	42,931 12	205,605 30	46,440 46	178,748 81	56,976 83	207,234 94	60,917 19
163,757 92	.....	149,990 63	.....	149,999 85	.....	165,967 22	.....

1893-94.		1894-95.		1895-96.		1896-97.	
22,634 37	28,632 82	21,938 56	33,211 60	24,917 48	35,681 68	2,198 47	32,814 66
11,692 82	7,211 82	12,459 34	8,836 18	11,870 43	8,160 98	21,592 40	7,876 12
18,522 94	8,333 24	21,370 94	11,170 36	20,526 56	10,696 88	12,910 80	10,110 77
20,420 81	5,296 27	23,555 38	7,075 07	23,049 41	6,180 93	21,671 92	5,239 55
3,078 55	980 15	3,796 58	3,312 30	3,555 87	2,161 85	23,682 33	2,032 25
5,331 29	926 99	6,178 71	2,458 80	6,915 20	2,256 69	3,744 36	1,719 00
5,283 21	25,337 90	6,218 74	23,517 25	6,226 77	26,410 75	1,908 14	344 13
45,024 67	.....	39,730 93	.....	38,050 41	.....	8,841 64	39,888 82
115,147 59	.....	100,207 29	.....	102,021 72	.....	2,181 58	27,330 73
34,892 19	.....	24,619 86	.....	20,203 25	.....	2,181 58	99,357 41
282,028 44	76,719 19	260,076 33	89,581 56	257,237 10	91,549 76	62,777 30	100,025 30
158,794 54	.....	160,089 42	.....	163,567 99	.....	.....	154,389 77
.....	.....	420,165 75	.....	420,805 09	.....	.....	.....

APPENDIX No. 2.

FISHING BOUNTIES.

The payments made for this service are under the authority of Act 54-55 Vic., cap. 42, intituled: "An Act to encourage the development of the sea fisheries and the building of fishing vessels," which provides for the payment of the sum of \$160,000 annually, under regulations to be made from time to time by the Governor General in Council.

REGULATIONS.

The regulations governing the payment of the bounty established by Order in Council, on the 24th of August, 1894, are as follows:—

Order in Council.

AT THE GOVERNMENT HOUSE AT OTTAWA,
FRIDAY, the 24th day of August, 1894.

Present :

HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

His Excellency, in virtue of the provisions of "The Bounty Act, 1891," 54-55 Victoria, chapter 42, and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the Regulations governing the payment of fishing bounties established by Order in Council of the 2nd November, 1893, and the amendment of the 27th November, 1893, shall be and the same are hereby rescinded and the following substituted therefor:

1. Fishermen who have been engaged in deep-sea fishing for fish other than shell-fish, salmon and shad, or fish taken in rivers or mouths of rivers, for at least three months, and have caught not less than 2,500 pounds of sea fish, shall be entitled to a bounty; provided always that no bounty shall be paid to men fishing in boats measuring less than 13 feet keel, and not more than three men (the owner included) will be allowed as claimants in boats under 20 feet.

2. No bounty shall be paid upon fish caught in trap-nets, pound-nets and weirs, nor upon the fish caught in gill-nets fished by persons who are pursuing other occupations than fishing, and who devote merely an hour or two daily to fishing these nets and are not, as fishermen, steadily engaged in fishing.

3. Only one claim will be allowed in each season, even though the claimant may have fished in two vessels, or in a vessel and a boat or in two boats.

4. The owners of boats measuring not less than 13 feet keel which have been engaged during a period of not less than three months in deep-sea fishing for fish other than shell-fish, salmon or shad, or fish taken in rivers or mouths of rivers, shall be entitled to a bounty on each such boat.

5. Canadian registered vessels of 10 tons and upwards (up to 80 tons) which have been exclusively engaged during a period of not less than three months in the catch of sea-fish other than shell-fish, salmon or shad, or fish taken in rivers or mouths of rivers, shall be entitled to a bounty to be calculated on the registered tonnage, one-half of which bounty shall be payable to the owner or owners and the other half to the crew, except in cases where one or more of the crew shall have failed to comply with the regulations, then such share or shares shall not be paid.

6. The three months during which a vessel must have been engaged in fishing, to be entitled to bounty, shall commence on the day the vessel sails from port on her fishing voyage and end the day she returns to port from said voyage.

7. Owners or masters of vessels intending to fish and claim bounty on their vessels must, before proceeding on a fishing voyage, procure a license from the nearest Collector of Customs or Fishery Overseer, said license to be attached to the claim when sent in for payment.

8. Dates and localities of fishing must be stated in the claim, as well as the quantity and kinds of sea-fish caught.

9. Ages of men must be given. Boys under 14 years of age are not eligible as claimants.

10. Claims must be sworn to as true and correct in all their particulars.

11. Claims must be filed on or before the 30th November in each year.

12. Officers authorized to receive claims will supply the requisite blanks free of charge, and after certifying the same will transmit them to the Department of Marine and Fisheries.

13. No claim in which an error has been made by the claimant or claimants shall be amended, after it has been signed and sworn to as correct.

14. Any person or persons detected making returns that are false or fraudulent in any particular will be debarred from any further participation in the bounty and be prosecuted according to the utmost rigour of the law.

15. The amount of the bounty to be paid to fishermen and owners of boats and vessels will be fixed from time to time by the Governor in Council.

16. From and after 1st January, 1895, all vessels fishing under bounty license are required to carry a distinguishing flag, which must be shown at all times during the fishing voyage at the main topmast head. The flag must be four feet square, in equal parts of red and white, joined diagonally from corner to corner. Any case of neglect to carry out this regulation reported to the Department of Marine and Fisheries, will entail the loss of the bounty, unless satisfactory reasons are given for its non-compliance.

JOHN J. McGEE,
Clerk of the Privy Council.

There were received for the year 1896, 15,211 claims, an increase of 484 over 1895.

The number of claims paid during the year was 14,975, being an increase of 195 as compared with the previous year.

There was \$57,014.77 in bounties paid to vessels and their crews, and \$97,385 to boats and boat fishermen, making the total bounty paid during the year 1896-7, \$154,389.77.

The number of vessels which received bounty during the year was 862, the total tonnage being 28,551 tons, showing a decrease of 45 vessels and 1,605 tons, as compared with the previous year.

Bounty was paid on 14,106 boats, and to 23,821 boat fishermen during the year, being an increase of 233 boats, and a decrease of 737 fishermen, as compared with 1895-6.

The bounty was first paid in 1882.

The following table shows the number of claims and fishermen, and the amount of bounty paid each year since 1882.

Year.	No. of claims.	No. of fishermen.	Amount paid.
			\$ cts.
1882.....	11,972	29,932	172,285 47
1883.....	13,086	33,399	130,344 85
1884.....	12,468	31,297	155,718 98
1885.....	14,124	33,564	161,539 39
1886.....	14,900	33,523	160,903 59
1887.....	15,416	34,387	163,757 92
1888.....	15,599	34,887	150,185 53
1889.....	17,078	38,343	158,526 54
1890.....	17,959	39,050	158,241 01
1891.....	18,506	38,859	156,891 85
1892.....	14,442	29,064	159,752 14
1893.....	13,635	28,013	158,234 10
1894.....	14,350	29,222	160,066 80
1895.....	14,780	30,808	163,567 99
1896.....	14,975	29,486	154,389 77
Totals	223,290	493,834	2,364,405 93

The bounty was paid each year on the following basis:—

1882, vessels \$2 per ton, one-half to the owner and the other half to the crew.

Boats at the rate of \$5 per annum, one-fifth to the owner and four-fifths to the men.

1883, vessels \$2 per ton, and Boats \$2.50 per man, distributed as in 1882.

1884, vessels \$2 per ton, as in 1882 and 1883.

Boats from 14 to 18 feet keel..... \$1 00

do 18 to 25 do .. 1 50

do 25 feet keel upwards..... 2 00

And boat fishermen \$3 each.

1885, 1886 and 1887, vessels, \$2 per ton as in previous years. Boats measuring 13 feet keel having been admitted in 1885, the rates were:—Boats from 13 to 18 feet keel, \$1.00; from 18 to 25 feet keel, \$1.50; from 25 feet keel upwards, \$2.00, and fishermen \$3 each.

1888, vessels \$1.50 per ton, one-half each to owner and crew. Boats, the same as in 1885, 1886 and 1887.

1889, 1890 and 1891, vessels, \$1.50 per ton as in 1888. Boats \$1 each. Boat fishermen \$3.

1892, vessels \$3 per ton, one-half each to owner and crew. Boats \$1 each. Boat fishermen \$3.

1893, vessels \$2.90 per ton, paid as formerly. Boats \$1 each. Boat fishermen \$3.

1894, vessels, \$2.70 per ton, distributed as in previous years. Boats \$1 each. Boat fishermen \$3.

1895, vessels \$2.60 per ton, half each to owner and crew. Boats \$1 each. Boat fishermen \$3.

1896, vessels \$1 per ton, which was paid to the owners, and vessel fishermen \$5 each, clause 5 of the regulations having been amended accordingly. Boats \$1 each, and boat fishermen \$2.50 per man.

Since 1882, 12,280 vessels, totalling a tonnage of 452,016 tons have received the bounty. The total number of vessel fishermen which received bounty is 93,732, being an average of 8 men per vessel.

The total number of boats to which bounty was paid since 1882 is 210,878, and the number of fishermen 400,102. Average number of men per boat, 2.

The highest bounty paid per head to vessel fishermen was \$21.75 in 1893; the lowest 83 cents, while the highest to boat fishermen was \$4, the lowest \$2.

The general average paid per head is \$4.79.

GENERAL STATEMENT of Fishing Bounty Claims received and paid for the year 1896.

Province.	County.	Number of Claims received.	Number of Claims rejected.	Number of Claims paid.
Nova Scotia	Annapolis	158		158
	Antigonish	134	1	133
	Cape Breton	442	3	*440
	Colchester			
	Cumberland	5		5
	Digby	373	1	372
	Guysborough	1,371	5	1,366
	Halifax	1,457	9	1,448
	Inverness	606	1	605
	King's	44		*45
	Lunenburg	1,162	2	1,160
	Pictou	38		38
	Queen's	225	6	219
	Richmond	1,055	5	1,050
	Shelburne	845	6	839
	Victoria	466		*467
	Yarmouth	216		*217
	Totals	8,597	39	8,562
New Brunswick	Charlotte	473	1	472
	Gloucester	514	38	476
	Kent	108	20	88
	Northumberland	5		5
	Restigouche	1		1
	St. John	22		22
	Westmoreland	14	14	
	Totals	1,137	73	1,064
Prince Edward Island	King's	581		581
	Prince	433	4	*441
	Queen's	97		*98
	Totals	1,111	4	1,120
Quebec	Bonaventure	965	74	891
	Gaspé	2,454	67	*2,391
	Rimouski	32	1	31
	Saguenay	915	3	*916
	Totals	4,366	145	4,229

RECAPITULATION.

Nova Scotia	8,597	39	8,562
New Brunswick	1,137	73	1,064
Prince Edward Island	1,111	4	1,120
Quebec	4,366	145	4,229
Grand Totals.	15,211	261	14,975

* NOTE.—The number of claims paid includes several applications for previous years which explains the difference between claims paid and claims received after deducting those rejected.

**DETAILED STATEMENT of Fishing Bounties paid to Vessels in each County for
the Year 1896.**

Province.	County.	Number of Vessels.	Tonnage.	Average Tonnage.	Number of Men.	Amount paid.
						8 cts.
Nova Scotia	Annapolis	6	210	35	35	385 00
	Antigonish	3	38	12·66	7	73 00
	Cape Breton	11	188	17·09	47	423 00
	Cumberland	3	43	14·33	6	73 00
	Digby	46	1,341	29·15	346	3,071 00
	Guysborough	25	622	24·88	109	1,167 09
	Halifax.	65	1,504	23·13	328	3,144 00
	Inverness	25	454	18·16	122	1,064 00
	King's.	5	75	15	10	125 00
	Lunenburg	164	11,908	72·61	2,032	22,073 00
	Pictou.	2	38	19	5	63 00
	Queen's	15	661	44·06	103	1,191 00
	Richmond	71	2,268	31·94	480	4,668 00
	Shelburne	75	2,172	28·96	533	4,837 00
	Victoria	1	17	17	1	22 00
	Yarmouth	36	1,876	52·11	440	4,077 95
	Totals	553	23,415	42·34	4,607	46,456 95
New Brunswick.....	Charlotte.....	51	946	18·55	175	1,821 00
	Gloucester.....	188	2,228	11·85	589	5,189 88
	Kent					
	Northumberland.....	2	24	12	7	59 00
	Restigouche	1	26	26	5	51 00
	St. John.....	8	113	14·12	24	233 00
	Totals	250	3,337	13·34	800	7,353 88
Prince Edward Island...	King's.	12	350	29·16	59	645 00
	Prince	6	173	28·83	36	353 00
	Queen's.....	5	133	26·60	19	228 00
	Totals.....	23	656	28·52	114	1,226 00
Quebec	Gaspé.....	2	58	29	13	123 00
	Rimouski.....	1	23	23	3	38 00
	Saguenay	33	1,062	32·18	128	1,816 94
	Totals.....	36	1,143	31·75	144	1,977 94

RECAPITULATION.

Nova Scotia.....	553	23,415	42·34	4,607	46,456 95
New Brunswick.....	250	3,337	13·34	800	7,353 88
Prince Edward Island	23	656	28·52	114	1,226 00
Quebec.....	36	1,143	31·75	144	1,977 94
Grand Totals.	862	28,551	33·12	5,665	57,014 77

DETAILED STATEMENT of Fishing Bounties paid to Boats in each County for
the Year 1896.

Province.	County.	Number of Boats.	Number of Men.	Amount paid.	Total Bounty paid to Vessels and Boats in 1896.
				\$ cts.	\$ cts.
Nova Scotia	Annapolis.....	152	233	967 50	1,352 50
	Antigonish.....	130	185	777 50	850 50
	Cape Breton.....	429	832	3,338 50	3,761 50
	Cumberland.....	2	4	16 00	89 00
	Digby.....	326	596	2,412 00	5,483 00
	Guysborough.....	1,340	2,164	8,914 00	10,081 00
	Halifax.....	1,383	1,919	8,100 50	11,244 50
	Inverness.....	580	1,272	5,032 00	6,096 00
	King's.....	40	57	239 00	364 00
	Lunenburg.....	996	1,138	4,977 00	27,050 00
	Pictou.....	36	48	204 00	267 00
	Queen's.....	204	316	1,310 00	2,501 00
	Richmond.....	979	1,418	5,942 00	10,610 00
	Shelburne.....	764	1,246	5,125 00	9,962 00
	Victoria.....	466	763	3,135 50	3,157 50
	Yarmouth.....	181	263	1,101 50	5,179 45
	Totals	8,008	12,454	51,592 00	98,048 95
New Brunswick.....	Charlotte.....	421	645	2,678 50	4,499 50
	Gloucester.....	288	719	2,804 00	7,993 88
	Kent.....	88	158	641 00	641 00
	Northumberland.....	3	9	34 50	93 50
	Restigouche.....				51 00
	St. John.....	14	22	91 00	324 00
	Westmoreland.....				
	Totals	814	1,553	6,249 00	13,602 88
Prince Edward Island.....	King's.....	567	923	3,797 50	4,442 50
	Prince.....	435	956	3,766 00	4,119 00
	Queen's.....	93	247	956 00	1,184 00
	Totals	1,095	2,126	8,519 50	10,141 50
Quebec	Bonaventure.....	891	1,511	6,179 50	6,179 50
	Gaspé.....	2,389	4,667	18,719 00	18,842 00
	Rimouski.....	30	43	180 50	218 50
	Saguenay.....	879	1,467	5,935 50	7,752 44
	Totals	4,189	7,688	31,014 50	32,992 44

RECAPITULATION.

Nova Scotia.....	8,008	12,454	51,592 00	98,048 95
New Brunswick.....	814	1,553	6,249 00	13,602 88
Prince Edward Island.....	1,095	2,126	8,519 50	10,141 50
Quebec.....	4,189	7,688	31,015 50	32,992 44
Grand Totals.....	14,106	23,821	97,375 00	154,389 77

COMPARATIVE STATEMENT by PROVINCES for the Years 1882 to 1896, inclusive, showing:—

(1) Total number of Fishing Bounty Claims received and paid by the Department of Marine and Fisheries.

YEAR.	NOVA SCOTIA.		NEW BRUNSWICK.		PRINCE EDWARD ISLAND.		QUEBEC.		TOTAL.	
	Received.	Paid.	Received.	Paid.	Received.	Paid.	Received.	Paid.	Received.	Paid.
1882.....	6,730	6,613	1,257	1,142	1,169	1,100	3,162	3,117	12,318	11,972
1883.....	7,171	7,076	1,693	1,579	1,138	1,106	3,602	3,325	13,604	13,086
1884.....	7,007	6,930	1,252	1,224	923	885	3,470	3,429	12,652	12,468
1885.....	7,646	7,599	1,609	1,588	1,117	1,025	3,943	3,912	14,315	14,124
1886.....	7,639	7,702	1,767	1,763	1,131	1,080	4,275	4,355	14,812	14,900
1887.....	8,262	8,227	1,975	1,958	1,201	1,126	4,138	4,105	15,576	15,416
1888.....	8,481	8,429	2,065	2,026	1,153	834	4,328	4,310	16,027	15,599
1889.....	8,816	8,523	2,428	2,392	1,211	1,511	4,664	4,632	17,119	17,078
1890.....	9,337	9,429	2,522	2,469	1,352	1,257	4,860	4,804	18,071	17,959
1891.....	10,242	10,063	2,831	2,084	1,482	1,446	5,108	4,913	19,663	18,506
1892.....	8,272	8,186	1,067	1,001	1,065	1,051	4,425	4,204	14,829	14,442
1893.....	7,926	7,844	967	881	1,027	1,012	4,059	3,898	13,979	13,635
1894.....	8,640	8,600	925	911	983	963	3,948	3,876	14,496	14,350
1895.....	8,835	8,825	979	975	1,009	1,025	3,904	3,955	14,727	14,780
1896.....	8,597	8,562	1,137	1,064	1,111	1,120	4,366	4,229	15,211	14,975
Totals.....	123,601	122,608	24,474	23,057	17,072	16,541	62,252	61,084	227,399	223,290

FISHING BOUNTIES.

17

(2) NUMBER of vessels, tonnage and number of men which received Bounty in each year.

YEAR.	NOVA SCOTIA.			NEW BRUNSWICK.			PRINCE EDWARD ISLAND.			QUEBEC.			TOTAL.		
	No. of Vessels.	Ton- nage.	No. of Men.	No. of Vessels.	Ton- nage.	No. of Men.	No. of Vessels.	Ton- nage.	No. of Men.	No. of Vessels.	Ton- nage.	No. of Men.	No. of Vessels.	Ton- nage.	No. of Men.
1882.	588	22,841	5,343	120	2,171	531	15	389	74	63	2,210	538	786	27,611	6,486
1883.	700	29,788	6,238	126	2,102	496	16	450	66	62	2,236	443	904	34,576	7,243
1884.	700	29,828	6,327	139	2,289	560	16	582	92	56	1,965	382	911	34,664	7,361
1885.	629	27,709	5,897	128	2,120	496	19	597	113	55	1,791	317	831	32,217	6,823
1886.	562	25,375	5,022	145	2,628	520	32	1,071	215	52	1,730	320	791	30,804	6,077
1887.	566	24,520	4,900	154	2,889	563	38	1,677	338	54	1,883	334	812	30,969	6,135
1888.	589	26,005	5,450	150	2,545	544	37	1,245	249	51	1,842	388	827	31,640	6,631
1889.	597	27,123	5,684	153	2,590	565	35	1,274	239	48	1,729	330	833	32,716	6,818
1890.	540	23,955	4,935	133	2,129	447	32	1,002	203	34	1,182	220	739	28,268	5,805
1891.	527	22,780	4,618	124	2,051	411	27	778	155	27	924	168	705	26,533	5,352
1892.	507	22,279	4,611	108	1,683	343	30	983	139	23	803	159	668	25,748	5,252
1893.	536	23,195	4,780	210	2,922	634	27	910	151	32	952	179	805	27,979	5,744
1894.	602	24,735	5,077	238	3,189	721	21	594	114	38	1,066	178	899	29,584	6,090
1895.	603	25,018	5,184	238	3,107	764	27	769	129	39	1,262	173	907	30,156	6,250
1896.	553	23,415	4,607	250	3,337	800	23	656	114	36	1,143	144	862	28,551	5,665
Totals.	8,799	378,569	78,673	2,416	37,752	8,395	395	12,977	2,391	670	22,718	4,273	12,280	452,016	93,732

(3) NUMBER of Boats and boat fishermen which received Bounty in each year.

YEAR.	NOVA SCOTIA.		NEW BRUNSWICK.		P. E. ISLAND.		QUEBEC.		TOTAL.	
	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.
1882	6,043	12,130	1,024	2,530	1,087	3,070	3,071	5,716	11,225	23,446
1883	6,458	13,553	1,453	3,309	1,098	3,106	3,266	6,188	12,275	26,156
1884	6,257	12,669	1,086	2,505	869	2,346	3,344	6,416	11,556	23,936
1885	6,970	13,396	1,460	3,254	1,006	2,606	3,857	7,485	13,293	26,741
1886	7,140	13,351	1,618	3,567	1,048	2,547	4,303	7,981	14,109	27,446
1887	7,662	13,997	1,804	3,994	1,088	2,711	4,051	7,550	14,605	28,252
1888	7,840	14,115	1,876	4,148	797	2,141	4,259	7,852	14,772	28,256
1889	7,926	14,118	2,237	5,032	1,475	3,568	4,602	8,807	16,240	31,525
1890	8,886	15,738	2,324	5,242	1,192	3,024	4,766	9,241	17,168	33,245
1891	9,525	16,552	1,928	4,126	1,383	3,427	4,865	9,402	17,701	33,507
1892	7,679	12,307	893	1,765	1,021	2,047	4,181	7,693	13,774	23,812
1893	7,308	11,748	671	1,314	985	1,962	3,866	7,245	12,830	22,269
1894	7,956	12,899	661	1,281	913	1,813	3,821	7,139	13,351	23,132
1895	8,222	13,106	737	1,434	998	2,141	3,916	7,877	13,873	24,558
1896	8,008	12,454	814	1,553	1,095	2,126	4,189	7,688	14,106	23,821
Totals...	113,880	202,133	20,586	45,054	16,055	38,635	60,357	114,280	210,878	400,102

(4) TOTAL Number of men receiving Bounty in each year.

YEAR.	NOVA SCOTIA.	NEW BRUNSWICK.	P. E. ISLAND.	QUEBEC.	TOTAL.
	No. of Men.	No. of Men.	No. of Men.	No. of Men.	
1882.....	17,473	3,061	3,144	6,254	29,932
1883.....	19,791	3,805	3,172	6,631	33,399
1884.....	18,996	3,065	2,438	6,798	31,297
1885.....	19,293	3,750	2,719	7,802	33,564
1886.....	18,373	4,087	2,762	8,301	33,523
1887.....	18,897	4,557	3,049	7,884	34,387
1888.....	19,565	4,692	2,390	8,240	34,887
1889.....	19,802	5,597	3,807	9,137	38,343
1890.....	20,673	5,689	3,227	9,461	39,050
1891.....	21,170	4,537	3,582	9,570	38,859
1892.....	16,918	2,108	2,186	7,852	29,064
1893.....	16,528	1,948	2,113	7,424	28,013
1894.....	17,976	2,002	1,927	7,317	29,222
1895.....	18,290	2,198	2,270	8,050	30,808
1896.....	17,061	2,353	2,240	7,832	29,486
Totals.....	280,806	53,449	41,026	118,553	493,834

(5) TOTAL annual payments of Fishing Bounty.

Year.	Nova Scotia.	New Brunswick.	P. E. Island.	Quebec.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1882.....	106,098 72	16,997 00	16,137 00	33,052 75	172,285 47
1883.....	89,432 50	12,395 20	8,577 14	19,940 01	130,344 85
1884.....	104,934 09	13,576 00	9,203 96	28,004 93	155,718 98
1885.....	103,999 73	15,908 25	10,166 65	31,464 76	161,539 39
1886.....	98,789 54	17,894 57	10,935 87	33,283 61	160,903 59
1887.....	99,622 03	19,699 65	12,528 51	31,907 73	163,757 92
1888.....	89,778 90	18,454 92	9,092 96	32,858 75	150,185 53
1889.....	90,142 51	21,026 79	13,994 53	33,362 71	158,526 54
1890.....	91,235 64	21,108 33	11,686 32	34,210 72	158,241 01
1891.....	92,377 42	17,235 96	12,771 30	34,507 17	156,891 85
1892.....	109,410 39	10,864 61	9,782 79	29,694 35	159,752 14
1893.....	108,060 67	12,524 09	9,328 62	28,320 72	158,234 10
1894.....	111,460 03	12,690 80	7,875 79	28,040 18	160,066 80
1895.....	110,765 27	12,919 32	9,285 13	30,598 27	163,567 99
1896.....	98,048 95	13,602 88	10,141 50	32,992 44	154,389 77
Totals.....	1,504,156 39	236 898 37	161,508 07	462,239 10	2,364,405 93

LIST of Vessels which received Fishing Bounty for the Year 1896.

PROVINCE OF NOVA SCOTIA.

ANNAPOLIS COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner, or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
72978	Annie Coggins.....	Digby	21	David Hayden.....	Thorne's Cove ..	6	51 00
94700	Franklin S. Schenck ..	do	44	Fred. W. Thorn.....	do	5	69 00
94706	George J. Tarr.....	do	61	John S. Hayden.....	Victoria Beach..	14	131 00
94693	John H. Kennedy.....	do	54	John W. Snow.....	Thornville	3	69 00
94732	Only Son.....	Windsor	13	John Gordon.....	Margaretsville..	2	23 00
83253	Rescue	Annapolis	17	Josiah Burrell.....	Clementsport....	5	42 00

ANTIGONISH COUNTY.

96787	Benecia Boy.....	Halifax	11	Lawrence Hylan	Harbour au Bouche	2	21 00
103542	Emma Brow.....	do	17	Wm. Brow.....	do	3	32 00
90642	Komaroff	Yarmouth	10	John Brow.....	do	2	20 00

CUMBERLAND COUNTY.

83261	Economist.....	Digby	14	James E. Ogilvie.....	Parrsboro'.....	2	24 00
75614	Fawn	do	17	do	do	3	32 00
103022	May	Parrsboro'	12	Robert Spicer.....	Spencer's Island.	1	17 00

CAPE BRETON COUNTY.

100389	Annie F.....	Sydney	13	Jno. Farrell	Main-à-Dieu....	4	33 00
100372	Betsy Jane.....	do	11	Samuel Moore.....	Little Bras d'Or.	3	26 00
85381	Champion.....	do	19	Wm. Williams..	Louisburg	6	49 00
75571	Fanny	Liverpool	16	Stephen Colvez ..	Little Bras d'Or.	6	46 00
100383	Florence L.....	Sydney	10	Peter Leblanc ..	do	3	25 00
74039	James Henry.....	do	18	Vital Arsenaault..	do	4	38 00
80974	Mary Ann.....	do	13	Thomas Hart	Main-à-Dieu....	2	29 00
100380	Mary D.....	do	27	Simon Devoe	Little Bras d'Or.	7	62 00
92600	Merit	do	13	Alexander Leblanc..	do	4	33 00
88431	Mayflower.....	Halifax	21	Michael Mullins ..	Bateston.....	5	46 00
96792	Success.....	do	21	James O'Neil	do	3	36 00

DIGBY COUNTY.

94696	Annie M. Sproul...	Digby	70	Jno. W. Sproul.....	Digby	15	145 00
94708	Ann Eliza	do	62	D. & O. Sproul	do	8	102 00
88598	Alph. B. Parker...	St. John, N.B. ..	39	Holland Outhouse..	Tiverton	12	99 00
83258	Alfred.....	Digby	29	Edwin Haines	Freeport.....	9	74 00
83431	Acadian.....	Weymouth	32	Geo. H. Stevens ..	do	10	82 00
90660	Alice May	Yarmouth	18	Edgar McDormand ..	Westport.....	8	58 00
94704	Charles Haskell...	Digby	67	Howard Anderson ..	Digby	15	142 00
94698	Carrie H.....	do	20	Augustus Haycock ..	Westport.....	7	55 00
74331	Condor.....	Yarmouth	11	Howard Titus	do	3	26 00
75711	Dove	do	20	Joseph Ossinger.....	Tiverton	7	55 00
90662	Edward A. Horton.	Digby	67	Joseph E. Snow.....	Digby	9	112 00
94707	Ernest F. Norwood.	do	79	do	do	12	139 00
85683	Edith L.....	do	16	R. W. Ford	Westport.....	4	36 00
77740	Elmer	do	15	James Gower	do	6	45 00
75757	Etta.....	Yarmouth	17	Clarence Webber.....	do	6	47 00

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*DIGBY COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of crew paid.	Amount of Bounty paid.
							\$ cts.
100535	Fairplay	Digby	11	Casimir R. Comeau	Meteghan River.	1	16 00
74329	Fairy Queen	Yarmouth	13	Wallace Coggins	Westport	4	33 00
80798	Freddie G.	Digby	18	George Gower	do	7	53 00
77963	Freeman Colgate ..	St. Andrews, N.B.	26	Frank Morrell	do	10	76 00
83260	Gazelle	Digby	20	D. & O. Sproul	Digby	2	30 00
100537	Gertie H.	do	32	John Outhouse	Tiverton	7	67 00
90436	Genesta	Barrington	32	George Denton	Westport	11	87 00
100544	Helen Maud	Digby	26	Charles McDormand ..	do	8	66 00
100064	Isma	St. John, N. B.	31	Charles Hicks	do	9	76 00
83461	Josie L. Day	Digby	16	D. & O. Sproul	Digby	2	26 00
80604	Jennie C.	do	16	Charles Hicks	Westport	6	46 00
59388	Letitia	St. Andrews, N.B.	10	Peter H. Belliveau	Belliveau's Cove.	4	30 00
80881	Lena May	do	18	Freeman Small	Tiverton	8	58 00
85190	Lora T.	Digby	14	Joseph Thurber	Freeport	7	49 00
85687	Mabel	do	38	Wm. M. Denton	Westport	10	88 00
100487	Mabel B.	do	57	Chas. E. Finigan	Freeport	12	117 00
85682	Malapert	do	23	E. C. Bowers	Westport	9	68 00
80794	Minnie C.	do	18	Charles Bailey	do	7	53 00
100895	New Home	Weymouth	31	Moses Thibodeau	Church Point ..	9	76 00
94825	On Time	do	19	Henry Glaven	Westport	9	64 00
100539	Rowena	Digby	10	Warren Snow	Smith's Cove ..	3	25 00
83132	Restless	do	25	Charles Shaw	Centreville	8	65 00
85558	S. A. Crowell	Yarmouth	23	Wallace Gower	Westport	8	63 00
100609	Swan	Shelburne	56	Milton Haines	Freeport	12	116 00
38036	Twilight	Digby	14	Benjamin Taylor	Smith's Cove ..	3	29 00
75726	Thrush	Yarmouth	13	Frank S. Lent	Freeport	6	43 00
94694	Utah and Eunice ..	Digby	33	Edwin Haines	do	9	78 00
100543	W. Parnell O'Hara ..	do	79	Edgar Post	Digby	15	154 00
75595	West Wind	do	25	Syda & Cousins	do	*	25 00
88260	William C. Allan ..	Yarmouth	12	Thos. P. Saulnier	Meteghan	3	27 00
88264	Walter J. Clarke ..	Digby	20	Arthur Porter	Westport	6	50 00

GUYSBOROUGH COUNTY.

41771	Atalia	Guysborough ..	34	Wm. J. England	Middle Melford.	4	54 00
103453	Anna Maud	Arichat	10	Thos. Munroe	White Head	3	25 00
103332	Bonny Briar Bush ..	Pt. Hawkesbury	38	Jno. O'Neil	Auld's Cove	4	58 00
103321	Christie Campbell ..	do	55	Thos H. Peeples	Pirate Harbour.	7	90 00
100445	Carrie	Canso	12	Samuel Crant	White Head	3	27 00
38418	Dolphin	Arichat	36	Wm. S. Peart	Guysborough ..	6	66 00
83180	Friend	Halifax	17	Luke Mannett	Larry's River ..	5	42 00
88227	Fleetwing	do	32	Hubert Boudrot	Port Felix	5	57 00
85382	G. H. Marryatt	do	23	Daniel Fraser	Port Mulgrave ..	4	43 00
80999	Guardian Angel	Guysborough ..	21	Joseph Fougère, jr.	Larry's River ..	5	46 00
94963	Golden Seal	do	32	Edwd. B. Pelrine	do	8	72 00
53577	Ilda	Pt. Hawkesbury	27	Thomas England	Middle Melford.	3	42 00
57715	John Lawrence	Halifax	23	Chas. Hansen	do	4	43 00
83303	James Ryan	Port Medway ..	48	Wm. Harris	Halifax	2	58 00
69964	Lizzie A.	Pt. Hawkesbury	20	Jno. F. Reeves	Mulgrave Stn. ..	4	40 00
83403	M. A. Franklin	Halifax	22	Wm. Doiron	Charlo's Cove ..	5	47 00
88466	Minnie J.	Arichat	10	Perry Munroe	White Head	3	25 00
100446	Minnie May	Canso	12	Wm. L. Dort	Sandy Cove	3	27 00
75577	Mary Ann Bell	Lunenburg	33	Jos. O'Neil	Auld's Cove	5	58 00
80970	Orion	Halifax	24	Hubert Richard	Charlo's Cove ..	6	54 00
100231	Pearl	do	17	Martin Meagher	Canso	3	32 00
75892	Peter Mitchell	Pt. Hawkesbury	26	Wm. P. Power	Port Mulgrave ..	4	46 00
41649	Ranger	Pictou	24	Jno. Consins	Canso	5	49 00
92575	Robinetta	Halifax	14	Reuben H. Munroe	White Head	3	29 00
100444	Stella May	Canso	12	James Meagher	Canso	5	37

* Crew not entitled to bounty.

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

HALIFAX COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							¢ cts.
100221	Baleka	Halifax.	31	Andrew Gray, jr.	Sambro	7	66 00
103537	Bon Accord.	do	12	James W. Smith.	do	3	27 00
94662	Bessie Florence.	do	12	Chas. W. Twohig.	Pennant.	3	27 00
90496	Black Prince.	do	18	J. W. Slaunwhite.	Terence Bay.	4	38 00
73969	Bertha E.	do	21	A. E. Boutilier.	Ingram River.	*	21 00
103535	Cora Lee.	do	49	Robt. M. Freehill.	Halifax.	*	49 00
85663	Daring.	do	18	Chas. Slaunwhite, sr.	Terence Bay.	2	28 00
100220	E. J. Smith.	do	11	W. McC. Boak.	Halifax.	4	31 00
96785	Eva M. B.	do	45	George Bonang <i>et al.</i> ..	W. Chezzetcook.	10	95 00
92564	Evangeline.	do	23	Henry Young.	East Petpiswick.	*	23 00
90726	Ellen Maud.	do	16	Wm. Fleming, 1st.	Ketch Harbour.	4	36 00
90481	Ella D.	do	32	Archibald Darrach, sr.	Herring Cove.	8	72 00
85738	Emma F.	Lunenburg.	13	Amos Graves.	East Dover.	3	28 00
97046	Fredona.	Liverpool.	12	Edward Sturmy.	Spry Bay.	2	22 00
100259	Florence G.	Halifax.	15	Caleb Gray.	Sambro.	2	25 00
100247	Fairy Queen.	do	11	Geo. H. Nickerson.	do	2	21 00
85644	Flora.	do	42	Patrick Scallion.	Herring Cove.	10	92 00
80996	Gertie Belle.	Guysborough.	15	James Yorke.	Eastern Passage.	3	30 00
100228	Golden Dawn.	Halifax.	46	Edw. Conrad.	E. Chezzetcook.	14	116 00
90489	Green Leaf.	do	44	M. J. Julien <i>et al.</i>	W. Chezzetcook.	14	114 00
103544	Grace D.	do	10	J. Marryatt.	Pennant.	3	25 00
88220	Grande.	do	14	Jno. P. Slaunwhite.	Terence Bay.	3	29 00
96782	Glide.	do	10	Sydney H. Garrison.	Peggy's Cove.	1	15 00
83306	I.O.N.A.	do	26	Andrew Sullivan.	Herring Cove.	8	66 00
100216	Katie M.	do	11	Thomas Brophy.	Lower Prospect.	3	26 00
94661	L. C. Tough.	do	12	Jno. E. Tough.	Pennant.	3	27 00
96789	Lydia A. Mason.	do	39	Ernest Mason <i>et al.</i>	Tangier.	7	74 00
94665	Louis Luby.	do	41	Wm. J. Lapiere <i>et al.</i> ..	W. Chezzetcook.	13	106 00
75605	Little Annie.	do	27	Mathew Lynch, jr.	Ferguson Cove.	6	57 00
69103	Lady of the Lake.	do	20	Richard Christian.	Prospect.	5	45 00
100249	Minnie M.	do	10	Jno. P. Martin.	Ship Harbour.	4	30 00
103547	Morning Glory.	do	11	Wm. E. Murphy.	Murphy's Cove.	*	11 00
96805	Maggie May.	do	62	Jeremiah Fillis <i>et al.</i> ..	W. Chezzetcook.	17	147 00
100580	Maggie E. C.	Lunenburg.	20	Geo. S. Covey.	Hackett's Cove.	7	55 00
46498	Mariner.	Halifax.	56	J. H. Henley.	Spry Bay.	9	101 00
100238	Mary Bell.	do	10	Jno. A. McDonald.	Harrigan Cove.	2	20 00
85664	Mary E.	do	14	Andrew Twohig.	Pennant.	3	29 00
100227	May.	do	10	Wm. S. Henneberry.	Sambro.	2	20 00
100254	Myrtle M. Gray.	do	19	James Gray.	Pennant.	4	39 00
80841	Nina.	do	13	Wm. Murphy.	Owls Head.	2	23 00
85665	Nellie D.	do	12	John Fink.	Sambro.	3	27 00
103539	Neva.	do	11	Eph. Marryatt.	Pennant.	2	21 00
100245	Oracle.	do	18	W. McC. Boak.	Halifax.	4	38 00
92571	Primrose.	do	14	Angus Gray.	Pennant.	3	29 00
100241	Pansy.	do	32	Geo. Snare.	do	5	57 00
100474	R. Beatrice.	Lunenburg.	19	Isaac Corney.	West Dover.	3	34 00
75575	Rising Dawn.	do	13	Fredk. Boutilier.	Indian Harbour.	3	33 00
96806	Rising Sun.	Halifax.	28	Geo. Julien.	W. Chezzetcook.	5	53 00
100566	Rob S.	do	21	Geo. H. Marryatt.	Pennant.	5	46 00
77787	Rescue.	do	20	Wm. Connors.	East Dover.	3	35 00
74087	Sea Gem.	do	30	Mark Harpell.	West Jeddore.	6	60 00
100255	Seaflee.	do	12	James Stevens.	Porter's Passage.	4	32 00
37519	Safe Guide.	do	36	Geo. Connor.	Spry Bay.	7	71 00
64869	Sarah L. Oxner.	do	34	Edward Hayes.	Herring Cove.	10	84 00
100218	Sarah M. W.	do	14	Hezekiah Wambolt.	Indian Harbour.	5	39 00
77836	T. W. Smith.	do	35	Charles Beaver.	Spry Bay.	4	55 00
90494	Two Brothers.	do	21	James Smith <i>et al.</i>	E. Petpiswick.	4	41 00
103531	True Love.	do	10	Jno. C. Arnold.	Terence Bay.	3	25 00

* Crew not entitled to bounty.

List of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*HALIFAX COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	Nc. of Crew paid.	Amount of Bounty paid.
							<div> <div>\$</div> <div>cts.</div> </div>
90485	Violet West.	Halifax.	36	T. A. Gaetz, <i>et al.</i>	Seaforth.	11	91 00
100260	Violet.	do.	12	J. H. Smith.	Sambro.	3	27 00
96781	Venture.	do.	43	E. V. Dempsey.	Herring Cove.	10	93 00
100226	Willie H. Crosby.	do.	65	James Julien, <i>et al.</i>	W. Chezzetcook.	18	155 00
92578	Willetta.	do.	12	Joseph Gray.	Sambro.	3	27 00
61904	Water Lily.	do.	14	Isaac Morash.	West Dover.	2	24 00
85378	Zephyr.	do.	16	Robt. Shaunwhite.	Terence Bay.	5	41 00

INVERNESS COUNTY.

71302	Alice.	Charlotte town, P.E.I.	10	Patrick Cornier.	Cheticamp Point	5	35 00
103313	Catherine.	Pt. Hawkesbury.	10	Severin Chiasson.	Eastern Harbour	4	30 00
96778	Campania.	do.	11	C. Robin, Collas & Co. Ltd.	do.	4	31 00
83244	Claribel.	Charlotte town, P.E.I.	19	Chas. Doucet.	do.	5	44 00
85392	Colibri.	Pt. Hawkesbury.	18	James Britt.	Margaree Harbr	6	48 00
96767	Dove.	do.	49	P. Paint & Sons.	Pt. Hawkesbury.	9	94 00
96768	Elizabeth Ann.	do.	11	Magloire Poirier.	Cheticamp Point	4	31 00
103317	Flying Star.	do.	11	S. Belfontaine & P. Des- veaux.	Eastern Harbour	4	31 00
96774	Florence.	do.	11	Thomas Poirier.	do.	4	31 00
103311	Henry L. Philips.	do.	78	J. C. Skinner.	Port Hastings.	8	118 00
103312	Laura.	do.	13	Jos. Aucoin.	Eastern Harbour	5	38 00
103316	Laura.	do.	10	Ubalde Bourgeois.	do.	4	30 00
96775	Louise.	do.	11	Placide Boudrot.	do.	4	31 00
103318	Little Heir.	do.	19	Eusebez Chiasson.	do.	5	44 00
103315	Lillie.	do.	12	Fidèle Chiasson.	do.	4	32 00
103314	Mary.	do.	10	Polite Aucoin.	do.	4	30 00
96769	Mary Lambert.	do.	11	Luc Chiasson.	do.	4	31 00
69125	May Flower.	Halifax.	20	Hyacinthe Chiasson.	do.	6	50 00
96779	Majestic.	Pt. Hawkesbury.	12	C. Robin, Collas & Co., Ltd.	do.	4	32 00
96771	Marie.	do.	10	Xavier Roach.	do.	4	30 00
96777	Marie Joseph.	do.	11	Victor Roach.	do.	4	31 00
96770	O. L. B.	do.	12	Gabriel Boudrot.	do.	4	32 00
74332	Proditor.	Halifax.	54	Placide Leblanc.	Cheticamp.	9	99 00
96773	Virgin.	Pt. Hawkesbury.	10	Michael Ramard.	Eastern Harbour	4	30 00
96776	Willie B.	do.	11	John Roach.	Cheticamp Point	4	31 00

KING'S COUNTY.

80093	Anna K.	St. John, N.B.	14	A. E. Spicer.	Harbourville.	*	14 00
77732	Heather Bell.	Digby.	12	Joseph Parker.	Hall's Harbour.	*	12 00
103023	Minnie H.	Parrsboro'.	12	Wm. E. Hayes.	Canada Creek.	2	22 00
100744	Sea Queen.	Windsor.	18	Lorenzo Curry.	Harbourville.	4	38 00
94756	Sarah E. Ellis.	St. John, N.B.	19	Leonard Houghton.	Hall's Harbour.	4	39 00

* Crew not entitled to bounty.

LUNENBURG COUNTY.

103741	A. J. McKean.	Lunenburg.	80	Albert McKean.	Pleasantville.	10	130 00
103507	Annie.	do.	16	C. U. Mader.	Mahone Bay.	5	41 00
100846	Albatros.	do.	26	J. F. Zwicker.	do.	3	41 00
103745	Avis.	do.	80	A. V. Conrad.	Park's Creek.	14	150 00
103495	Athlon.	do.	80	J. Norman Rafuse.	Conquerall Bank	14	150 00
94790	Abana.	do.	80	James Ronkey.	Lower LaHave.	14	150 00
94783	Alaska.	do.	80	Solomon Smith.	do.	14	150 00
100170	Atlanta.	do.	80	Freeman Anderson.	Lunenburg.	14	150 00
100472	Arcana.	do.	80	Alex. Knickle.	do.	14	150 00
100489	Algoma.	do.	56	Jeffrey Publicover.	Dublin Shore.	9	101 00

List of Vessels which received Fishing Bounty,—Nova Scotia—*Con.*LUNENBURG COUNTY—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
94778	Argosy	Lunenburg	80	Charles Smith	Lunenburg	13	145 00
109839	Acalia	do	34	Nathan Silver	do	4	54 00
103503	B. G. Anderson	do	80	Thomas Hamm.	do	14	150 00
100838	Blanche A. Colp	do	80	C. U. Mader	Mahone Bay	14	150 00
103430	Beluga	do	80	A. V. Conrad	Park's Creek	14	150 00
94647	Bonus	do	80	George Creasor	Ritcey's Cove	12	140 00
94651	Bessie A	do	80	Murdoch McGregor	do	14	150 00
100163	Beauty	do	65	J. Norman Rafuse	Conquerall Bank	9	110 00
103501	Barcelona	do	80	James Ronkey	Lower La Have	14	150 00
100848	Britannia	do	59	Lambert Lobnes	Middle La Have	11	114 00
100571	Britannia	do	80	Charles Smith	Lunenburg	14	150 00
96823	Burnham H	do	80	Benjamin Morash	do	14	150 00
94782	Bona Fides	do	80	J. Joseph Rudolph	do	14	150 00
103421	Blenheim	do	80	Charles Smith	do	14	150 00
96828	Bonanza	do	80	Charles Silver	do	14	150 00
94645	C. A. Chisholm	do	80	Abraham Ernest	Mahone Bay	12	140 00
94658	C. A. Ernst	do	57	do	do	10	107 00
100159	C. U. Mader	do	80	C. U. Mader	do	14	150 00
103427	Cymbrian	do	60	Dean Fralick	Pleasantville	11	115 00
90824	Ceto	do	80	A. V. Conrad	Park's Creek	14	150 00
103502	Carlaine	do	80	Alvin Himmelman	Ritcey's Cove	14	150 00
100579	Citizen	do	80	Murdoch McGregor	do	14	150 00
97081	Carrie	do	80	Jno. M. Ritcey	do	14	150 00
97084	Calla Lily	do	62	Edmund Nirtle	La Have	11	117 00
100834	Comrade	do	80	W. N. Reinhardt	do	14	150 00
100823	Carrie	do	60	Adnah Burns	Dayspring	12	120 00
90875	Capio	do	72	G. N. C. Hawkins	Lunenburg	11	127 00
103415	Clarence Smith	do	80	G. Abram Smith	do	14	150 00
90869	Clara E. Mason	do	80	David Smith	do	12	140 00
103419	Cordova	do	80	Charles Smith	do	12	140 00
88355	D. A. Mader	do	80	C. U. Mader	Mahone Bay	12	140 00
90834	Diego	Port Medway	28	Harris Conrad	Cherry Hill	7	63 00
100841	Dora	Lunenburg	80	Wm. Acker	Lunenburg	12	140 00
97089	Dictator	do	80	S. Watson Oxner	do	14	150 00
88356	Energy	do	80	C. U. Mader	Mahone Bay	12	140 00
103424	Elva M	do	80	do	do	17	165 00
94659	Enterprise	do	80	Wm. Cleversey	Pleasantville	13	145 00
100827	Elnora	do	52	Josiah Gerhardt	Middle South	8	92 00
94960	Eureka	do	80	Reuben Smith	Ritcey's Cove	14	150 00
96821	Edgar T. Richard	do	55	Elias Richard	Getson's Cove	12	115 00
103506	Ebro	do	75	J. Wm. Young	Lunenburg	10	125 00
100151	Erminie	do	80	Wm. Young	do	14	150 00
103198	F. B. Wade	do	80	L. B. Currie	Dublin Shore	14	150 00
100481	Florence	do	29	Herbert Young	Indian Point	7	64 00
103743	Flo. F. Mader	do	80	C. U. Mader	Mahone Bay	14	150 00
103429	Fern	do	70	Edmen Walters	La Have	12	130 00
92638	Florence M	do	80	J. Alex. Silver	Lunenburg	13	145 00
90582	G. A. Smith	do	80	Jno. M. Ritcey	Ritcey's Cove	12	140 00
103411	Genevieve	do	80	Abraham Ernest	Mahone Bay	14	150 00
103505	Gladys May	do	80	Adam Selig	Vogler's Cove	16	160 00
97088	Glendale	do	38	Charles Bell	Dublin Shore	5	63 00
100488	Gurnet	do	56	Alvin Creaser	Ritcey's Cove	10	106 00
90862	Grenada	do	80	Reuber Romkey	Lower La Have	14	150 00
100825	Georgina	do	34	James Bell	Getson's Cove	6	64 00
100850	Grace	do	80	Daniel Getson	do	14	150 00
100480	Gallant	do	57	Elias Richard	do	12	117 00
97083	Garland	do	51	Jno. D. Sperry	Petite Rivière	7	86 00
100478	Gladioa	do	52	Kenneth Silver	Dayspring	10	102 00
96836	Gleaner	do	80	Wm. C. Acker	Lunenburg	11	135 00
94773	Galatea	do	80	Jno. B. Young	do	14	150 00
100576	Glad Tidings	do	80	J. Wm. Young	do	14	150 00
90825	Henry N. Batchelder	Port Medway	80	Sam'l. E. Teel	Vogler's Cove	14	150 00
103744	Harry Smith	Lunenburg	80	J. H. Wilson	Lunenburg	14	150 00
100569	Howard Young	do	80	James Young	do	14	150 00

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*LUNENBURG COUNTY—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid. \$ cts.
100490	Irene M. B.	Lunenburg.	66	Eli Ernst.	Mahone Bay.	12	126 00
96837	Irvin G.	do.	80	Freeman Spindler.	Middle South.	14	150 00
96830	J. A. Silver.	do.	80	Chas. L. Silver.	Lunenburg.	14	150 00
94785	J. C. Schwartz.	do.	80	Chas. Hewitt.	do.	14	150 00
100164	J. H. Ernst.	do.	80	S. Watson Oxner.	do.	14	150 00
100837	J. M. Young.	do.	80	Wm. Young.	do.	14	150 00
94654	J. W. Celdert.	do.	80	Jas. W. Geldert.	do.	14	150 00
103491	Jennie May.	do.	80	Martin Westhaver.	Martin's Brook.	14	150 00
94789	Joseph McGill.	do.	80	Gabriel Himmelman.	Middle South.	14	150 00
103414	Jeanie Myrtle.	do.	80	Murdoch McGregor.	Ritcey's Cove.	16	160 00
59475	Jessen.	do.	69	J. Norman Rafuse.	Conquerall Bank.	9	114 00
103202	L. B. Currie.	do.	80	Lauchlin B. Currie.	West Dublin.	14	150 00
96833	L. E. Young.	do.	80	Benj. Anderson.	Lunenburg.	16	160 00
94780	Lawrence.	do.	80	Abraham Ernst.	Mahone Bay.	13	145 00
94788	Laura C. Zwicker.	do.	80	do.	do.	12	140 00
83316	.....	Port Medway.	80	Sam'l. E. Teel.	Vogler's Cove.	14	150 00
103496	Loreana Maud.	Lunenburg.	80	David Ritcey.	Ritcey's Cove.	14	150 00
96827	Leopold.	LaHave.	80	Sam'l. Ritcey, Jr.	do.	14	150 00
100830	Lorraine C.	Lunenburg.	64	Aniel Corkum.	LaHave.	11	119 00
103418	Leader.	do.	80	Alex. Kinckle.	Lunenburg.	14	150 00
96832	Laura M. Knock.	do.	80	Allan R. Morash.	do.	12	140 00
90854	Latcna.	do.	80	S. Watson Oxner.	do.	13	145 00
103420	Luetta.	do.	80	David Smith.	do.	14	150 00
103510	M. J. Crosby.	do.	76	Charles Rafuse.	LaHave.	12	136 00
103413	Martello.	do.	65	Abraham Ernst.	Mahone Bay.	10	115 00
97052	Minnie Maud.	Liverpool.	80	J. S. Wolfe.	West Dublin.	15	155 00
100844	Mystic Tie.	Lunenburg.	64	J. N. Rafuse.	Conquerall.	11	119 00
83173	Maggie Smith.	do.	80	Jno. M. Ritcey.	Ritcey's Cove.	12	140 00
103425	Majestic.	do.	80	Reuben Ritcey.	do.	14	150 00
103426	Melbourne.	do.	61	Eber Gerhardt.	LaHave.	12	121 00
100849	Merl M. Parks.	do.	80	James Wamback.	do.	14	150 00
90823	Miletus.	Port Medway.	80	Jno. Shankle.	E. Mid. LaHave.	12	140 00
96840	May Flower.	Lunenburg.	60	Robt. Dawson.	Bridgewater.	8	100 00
103422	Mischief.	do.	80	T. A. Wilson.	do.	14	150 00
100840	Maritime.	do.	59	Francis Himmelman.	Getson's Cove.	9	104 00
100162	Magic.	do.	45	Jno. D. Sperry.	Petite Rivière.	8	85 00
103509	Maggie E. Z.	do.	70	Em. Sellers.	Feltzen South.	13	135 00
94772	Molega.	do.	80	Benj. Anderson.	Lunenburg.	14	150 00
94775	Malabar.	do.	80	R. H. Griffiths.	do.	14	150 00
92632	Monarch.	do.	80	Allan R. Morash.	do.	12	140 00
109574	Melrose.	do.	71	do.	do.	11	126 00
103416	Minnie J. Smith.	do.	80	Wm. C. Smith.	do.	16	160 00
97100	Maggie M. W.	do.	80	J. H. Wilson.	do.	14	150 00
94777	Maurice C. Geldert.	do.	80	Jno. B. Young.	do.	14	150 00
100153	Milo.	do.	80	J. Wm. Young.	do.	14	150 00
92640	Minerva.	do.	80	Wm. C. Acker.	do.	12	140 00
94966	Nicanor.	do.	79	McKinnon Westhaver.	Martin's Brook.	12	139 00
100485	Nightingale.	do.	52	Wallace Haughn.	LaHave.	10	102 00
90827	Nyanza.	do.	80	Elias Walters.	Lunenburg.	16	160 00
92636	Nonpareil.	do.	80	Jno. Zinck.	do.	14	150 00
88342	Nova Zembla.	do.	79	C. U. Mader.	Mahone Bay.	12	139 00
94779	O. P. Silver.	do.	80	Chas. L. Silver.	Lunenburg.	14	150 00
103499	Olivette.	do.	80	James Creaser, Jr.	Ritcey's Cove.	14	150 00
94641	Ovanda.	do.	80	Jeffrey Publicover.	Getson's Cove.	12	140 00
85562	Oresa.	do.	14	Alex. Kinckle.	Lunenburg.	4	34 00
94786	Ontario.	do.	80	Benj. C. Smith.	do.	14	150 00
100157	Orinoco.	do.	56	Wm. Westhaver.	do.	12	116 00
100486	Pandora.	do.	53	Abraham Cook.	Corkum's Island.	12	113 00
94774	Puritan.	do.	80	Theophilus Creaser.	Ritcey's Cove.	14	150 00
100483	Puma.	do.	58	Simon Pentz.	Getson's Cove.	13	123 00
100836	Panama.	do.	80	Henry Adams.	Lunenburg.	14	150 00
85647	Pembina.	do.	80	S. W. Oxner.	do.	10	130 00

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*LUNENBURG COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
53551	Roving Bird.	Halifax.	24	Joseph Langille.		4	44 00
100473	Rapture.	Lunenburg.	57	Alvin Moser.	Middle South.	12	117 00
100572	Rowena.	do.	51	Wm. Schmeisser.	La Have.	12	111 00
96834	Robert F. Mason.	do.	80	Martin Mason.	Lunenburg.	14	150 00
100165	Snow Queen.	do.	67	Leander Meisner.	Martin's Point.	12	127 00
88349	Senovar.	do.	80	Nathan Hiltz.	Martin's River.	12	140 00
94962	Stella A.	do.	80	Reuben Ritcey.	Ritcey's Cove.	13	145 00
94787	Samoa.	do.	80	James Geldert.	Lunenburg.	14	150 00
90868	Sadie.	do.	79	G. N. C. Hawkins.	do.	13	144 00
100471	Secret.	do.	80	Jno. B. Young.	do.	14	150 00
103500	St. Helena.	do.	80	Howard Wynaht.	do.	14	150 00
94657	T. W. Langille.	do.	71	Frank Conrad.	do.	13	136 00
92623	Torridon.	do.	80	Murdock McGregor.	Ritcey's Cove.	14	150 00
100575	Tyler.	do.	54	W. A. Zwicker.	Lunenburg.	9	99 00
103742	Unique.	do.	80	Abraham Ernst.	Mahone Bay.	14	150 00
103417	Uruguay.	do.	80	Daniel Lohnes.	Ritcey's Cove.	14	150 00
97098	Urania.	do.	80	David Heisler.	Lunenburg.	14	150 00
69200	Vesta.	do.	64	Martin Evans.	Chester.	*	64 00
100821	Venus.	do.	76	Jacob Hiltz.	Indian Point.	12	136 00
94776	Volunteer.	do.	80	Murdock McGregor.	Ritcey's Cove.	13	145 00
103504	Viking.	do.	80	Amiel Corkum.	La Have.	14	150 00
94956	Venezuela.	do.	80	Isaac Corkum.	Middle La Have.	12	140 00
83164	Valiant.	do.	80	A. H. Zwicker.	Lunenburg.	12	140 00
94967	White Cloud.	do.	80	C. U. Mader.	Mahone Bay.	15	155 00
96829	Westeria.	do.	80	Freeman Anderson.	Lunenburg.	14	150 00
100152	Werra.	do.	80	David Smith.	do.	14	150 00
100842	W. H. Walters.	do.	80	Thomas Walters.	do.	13	145 00
100833	Yucatan.	do.	80	J. Joseph Rudolph.	do.	14	150 00

PICTOU COUNTY.

83134	Infant.	Lunenburg.	15	Johnston Rhynard.	Pictou.	2	25 00
38510	Lily.	Pictou.	23	Geo. Rivers.	do.	3	38 00

QUEEN'S COUNTY.

103205	Aroostook.	Liverpool.	67	Andrew McNutt.	Liverpool.	*	67 00
90844	Armada.	Guysborough.	25	L. B. Cohoon.	Port Medway.	6	55 00
85564	Bessie Williams.	Barrington.	77	Abram W. Hendry.	Liverpool.	3	92 00
85478	Glenora.	Liverpool.	76	James C. Inness.	do.	16	156 00
103191	Jennie B.	do.	13	Wm. Vogler.	Port Jolly.	4	33 00
83310	Myosotis.	Port Medway.	80	Edwin Morine.	Port Medway.	14	150 00
94833	News Boy.	St. Andrews, NB.	16	Alex. Shankle.	Port Matoon.	5	41 00
103194	Oressa.	Liverpool.	10	Winot Arnold.	do.	4	30 00
61916	Only Son.	do.	16	Wm. A. Conrad.	Liverpool.	3	31 00
90832	Ronald H. C.	Port Medway.	55	L. B. Cohoon.	Port Medway.	14	125 00
103193	Startle.	Liverpool.	11	Albert Wagner.	Port Matoon.	4	31 00
103199	Trilby.	do.	12	Wm. Wigelsworth.	Liverpool.	2	22 00
83495	Utopia.	do.	80	James C. Inness.	do.	9	125 00
97041	W. H. Smith.	do.	43	Willard Godfrey.	Brooklyn.	7	78 00
94953	W. D. Richard.	Lunenburg.	80	Abram W. Hendry.	Liverpool.	15	155 00

*Crew not entitled to bounty.

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

RICHMOND COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
69143	Arequipa.....	Arichat.....	36	Philip Gruchy.....	D'Escousse.....	7	71 00
77544	Alpha.....	do.....	42	Wm. J. LeVesconte..	River Bourgeois..	4	97 00
88456	Alice May.....	do.....	39	do.....	do.....	10	89 00
36474	Alexander Fraser..	Lunenburg.....	32	A. Sampson.....	do.....	10	82 00
38501	B. Weir & Co.....	Arichat.....	25	J. Shannon and M. J. White	Basin River Inhabitants.....	4	45 00
35996	Blue Bell.....	do.....	25	Thos. Duyon.....	Martinique.....	3	40 00
94680	Bonnie Glen.....	Halifax.....	17	Xavier Marchaud....	Petit de Grat.....	4	37 00
75561	Boreas.....	Lunenburg.....	41	John Colford.....	Port Richmond..	7	76 00
54156	British Lady.....	Arichat.....	19	Albert Joyce.....	Riv. Inhabitants..	2	29 00
72061	C. P. M.....	do.....	22	Alex. Burke.....	River Bourgeois..	6	52 00
88459	Caroline.....	do.....	12	Jno. B. Giroir.....	West Arichat....	3	27 00
74100	Candid.....	do.....	23	Désiré Burke.....	River Bourgeois..	7	58 00
103452	Charlotte.....	do.....	73	David Walker.....	Basin River Inhabitants.....	6	103 00
72052	Dayspring.....	do.....	52	Charles Leblanc.....	Port Royal.....	4	72 00
72058	Daisy.....	do.....	34	Placide Richard.....	Arichat.....	3	49 00
75569	Empress.....	Lunenburg.....	47	Célestin Poirier....	L'w'r D'Escousse..	12	107 00
77822	Eliza Smith.....	Arichat.....	44	Alex. Poirier.....	Goulet.....	11	99 00
53811	Electric Flash.....	Halifax.....	53	Dominique Fougère..	Poulamond.....	13	118 00
103454	Ethel B.....	Arichat.....	10	Edward Leblanc.....	do.....	4	30 00
80994	Esperance.....	Guysborough..	16	Joseph Petitpas....	Arichat.....	3	25 00
38477	Elizabeth.....	Arichat.....	18	Placide Burke.....	River Bourgeois..	3	33 00
83395	Elerie.....	Halifax.....	29	Lewis Murray.....	Port Richmond..	3	44 00
83083	Emma Proctor.....	Port Hawkesb'y	41	Edward Procton.....	Riv'r Inhabitants	9	86 00
88462	Fannie S.....	Arichat.....	28	Docité Fougère.....	River Bourgeois..	8	68 00
74116	Fama.....	Halifax.....	44	Wm. Levesconte.....	do.....	10	94 00
38481	G. H. B.....	Arichat.....	36	Placide Forgeron....	West Arichat....	3	51 00
88599	Guide.....	Halifax.....	38	Edward Poirier.....	L. D'Escousse.....	12	98 00
100161	Hilda Maud..	Port Hawkesb'y	46	Jno. G. Murray.....	Port Richmond..	4	66 00
38468	Hector.....	Arichat.....	35	Edward J. Walker....	Basin River Inhabitants.....	7	70 00
88468	Irene.....	do.....	12	D. M. Gruchy.....	Petit de Grat....	3	27 00
96764	Ida C. Spoffard....	Port Hawkesb'y	54	Robt. Murray.....	Port Richmond..	7	89 00
83135	J. B. M.....	Halifax.....	20	Samuel Burke.....	St. Peters.....	6	50 00
88454	Jubilee.....	Arichat.....	34	David Gruchy.....	D'Escousse.....	9	79 00
85560	Jacques.....	Yarmouth.....	58	Fredk. Poirier.....	do.....	14	128 00
80972	John Vincin.....	Sydney.....	17	Simon Delorey.....	Janvrin Island..	3	32 00
38486	Julia.....	Arichat.....	20	Louis Burke.....	River Bourgeois..	7	55 00
88467	Katie.....	do.....	11	Frank Sampson.....	Poulamond.....	4	31 00
72070	Lennox.....	do.....	46	David Gruchy.....	D'Escousse.....	12	106 00
37551	Leading Star.....	Halifax.....	39	Remie Joyce.....	do.....	10	89 00
88455	Laura Victoria....	Arichat.....	39	Henry McDonald.....	do.....	10	89 00
38516	Lady of the Lake..	do.....	26	Peter Landry.....	St. Peters.....	8	66 00
96763	Lelia Linwood.....	do.....	67	Wm. J. Levesconte..	River Bourgeois..	15	142 00
72071	Lumen Diei.....	do.....	20	Urbain Sampson.....	do.....	5	45 00
74054	Laura E. Douglass.	Barrington.....	39	Joseph Steele.....	Port Richmond..	6	69 00
38417	Messenger.....	Arichat.....	30	Cléophas Boudrot....	Poulamond.....	6	60 00
72063	May Flower.....	do.....	12	John Burke.....	River Bourgeois..	5	37 00
88463	Maria.....	do.....	14	Andrew Boudrot....	Petit de Grat....	4	34 00
38522	Mary.....	do.....	23	Isaiah Boudrot.....	River Bourgeois..	7	58 00
88464	Mary E.....	do.....	10	Charles Wolfe.....	Arichat.....	3	25 00
85388	Mary Alice.....	Halifax.....	20	Wm. Malcolm & Sons.	Port Malcolm....	3	35 00
74365	Nova Stella.....	Arichat.....	53	Leon Poirier.....	D'Escousse.....	15	128 00
72048	Neptune.....	do.....	26	Wm. Levesconte.....	River Bourgeois..	5	51 00
54139	Ocean Belle.....	Halifax.....	20	Isidore Fougère.....	Poulamond.....	8	60 00
61630	Olive J.....	do.....	57	Jno. Malcolm.....	Port Malcolm....	8	97 00
72067	Philomene D.....	Arichat.....	22	Jno. Pelham.....	Madame Island..	3	37 00
46485	Quickstep.....	Port Hawkesb'y	52	Jno. G. Murray, <i>et al.</i>	Port Richmond..	6	82 00
88439	Ripple.....	Halifax.....	20	Isidore Boudrot....	Petit de Grat....	4	40 00
64033	Ripple.....	Port Hawkesb'y	34	Geo. A. Crookshank..	Port Richmond..	7	69 00
75763	Ripple.....	Arichat.....	17	Daniel McDonald.....	Basin River Inhabitants.....	2	27 00

List of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*RICHMOND COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
73119	Royal.....	Halifax.....	12	Isaac Dugas.....	West Arichat...	2	22 00
88452	R. Ferguson...	Arichat.....	24	Maurice Burk.....	St. Peters.....	7	59 00
51781	S. E. Cove.....	Halifax.....	54	Rémi Fougère.....	Poulaumont....	12	114 00
85645	Sissie Belle.....	do.....	40	Firmin Fougère.....	do.....	11	95 00
84865	Stella.....	Arichat.....	46	F. A. Burke.....	River Bourgeois.	12	106 00
92599	Thistle.....	Sydney.....	11	R. Manbournette...	L'Ardoise.....	4	31 00
61990	Union.....	Halifax.....	20	Arthur Leblanc.....	Arichat.....	2	30 00
61946	Union.....	do.....	23	Laurence Lavache...	West Arichat...	2	33 00
71034	Vanguard.....	Arichat.....	51	Dom. Boudrot.....	Petit de Grat...	7	86 00
38523	Victoria.....	do.....	24	Henry Burke.....	St. Peters.....	7	59 00
57662	Village Bride...	Halifax.....	24	Peter Malcolm.....	Port Malcolm....	6	54 00
94666	Winged Arrow....	do.....	56	Thomas Boudrot....	Poulaumont....	14	126 00

SHELBURNE COUNTY.

97034	A. D'E.....	Yarmouth.....	15	David Blades.....	Upper Wood's Harbour.....	4	35 00
94632	A. C. Greenwood..	Shelburne.....	15	Hugh M. Perry.....	Black Point.....	5	40 00
90655	Annina.....	Yarmouth.....	12	Benjamin Penney...	South Side.....	6	42 00
100612	Ardella.....	Shelburne.....	10	Adam J. Firth.....	Sand Point.....	4	30 00
100617	Altona.....	do.....	28	Austin Swansburg...	Little Harbour..	8	68 00
100620	Alina.....	do.....	80	Churchill Lake.....	Lockeport.....	18	170 00
103701	Black Prince.....	Yarmouth.....	15	Thos. W. Crowell...	Baccaro.....	4	33 00
88551	Blanche M. Thorbourne.	Shelburne.....	80	Jno. H. Thorbourne..	Jordan Bay.....	19	175 00
103186	Britannia.....	do.....	11	Ross Enslow.....	Green Harbour..	4	31 00
103187	Ben Bolt.....	do.....	80	Clifford Locke.....	Lockeport.....	19	175 00
100604	Bella H. McKinnon	do.....	35	do.....	do.....	9	80 00
97028	Bertha.....	Yarmouth.....	10	Edwin William.....	Green Harbour..	4	30 00
103181	Curlew.....	Shelburne.....	63	Arthur Hood.....	Shelburne.....	14	133 00
96970	Charlie Richardson	do.....	26	John B. Harding.....	Rockland.....	8	66 00
100605	Dawn.....	Barrington.....	49	Angus N. Smith.....	Barrington.....	11	104 00
100613	Dove.....	Shelburne.....	80	Jno. M. Harding.....	Osbourne.....	8	120 00
83492	Dessie.....	Liverpool.....	11	E. A. Capstick.....	Lockeport.....	4	31 00
90644	Eva Mc.....	Yarmouth.....	19	James E. Smith.....	Lower Shag Harbour.....	3	34 00
85731	Eva L. H.....	Shelburne.....	62	B. P. Thorbourn.....	Sandy Point.....	13	127 00
96976	Edith.....	do.....	40	Enos Churchill.....	Lockeport.....	8	80 00
90645	Fly.....	Yarmouth.....	16	Chas. M. Wickens...	Shag Harbour..	4	36 00
85476	Fleetwing.....	Shelburne.....	11	Wilson Sperry.....	Green Harbour..	5	36 00
103065	Garnet.....	Yarmouth.....	27	Wm. P. Snow.....	Port La Tour....	5	52 00
100818	Geneva Ethel.....	Barrington.....	29	Charles Kenny.....	Clarke's Harbour	8	69 00
80831	Glide.....	Lunenburg.....	16	Charles Anderson...	Sable River.....	5	41 00
80799	Hattie T.....	Digby.....	16	Isaac Nickerson.....	Shag Harbour..	2	26 00
100815	Happy Home.....	Barrington.....	16	Harvey Slate.....	Cape Negro.....	4	30 00
90647	Hattie Emeline...	Yarmouth.....	11	Chas. A. Reynolds...	Upper Pt LaTour	3	26 00
97057	Horace B.....	Liverpool.....	14	Geo. Hiltz.....	Lockeport.....	5	39 00
100607	Icelda.....	Shelburne.....	19	Clifford Locke.....	do.....	5	44 00
103174	Iona.....	do.....	15	Wm. L. Page.....	do.....	5	40 00
85566	J. Lyons.....	Barrington.....	15	Wm. H. Nickerson...	Cape Negro.....	7	50 00
80689	James Beckwith...	do.....	31	Benjamin Newell...	Clarke's Harbour	3	46 00
94941	John Purney.....	Shelburne.....	80	Geo. H. King.....	Sandy Point.....	21	185 00
54132	John Franklin...	Halifax.....	18	Robert Firth.....	Jordan River....	6	48 00
88554	Jersey Lily.....	Shelburne.....	80	Enos Churchill.....	Lockeport.....	14	150 00
73967	Katie.....	Liverpool.....	14	Churchill Locke.....	do.....	5	39 00
90438	Lark.....	Barrington.....	13	Saml. Atwood.....	Oak Park.....	2	23 00
100817	Little Dorrit.....	do.....	64	Angus N. Smith.....	Barrington.....	14	134 00
80624	Lima.....	Yarmouth.....	12	Wm. Halliday.....	Bear Point.....	2	22 00
88261	Little Joe.....	do.....	18	Walter Chetwynd...	Upper Wood's Harbour.....	3	33 00

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*SHELBURNE COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
100320	Lena	Barrington	13	Nehemiah Smith.....	Clarke's Harbour	3	28 00
103185	Latona	Shelburne	80	Jno. A. Mc Gowan.....	Shelburne	21	185 00
100606	Myra Louise.....	Barrington	17	James Lowe	Clarke's Harbour	6	47 00
100816	Mattie Morrissey..	do	24	D. G. Morrissey.....	do	9	69 00
92568	Mary Kate	Shelburne	13	Samuel D. Rudolph...	Church Over.....	5	38 00
97024	Mary Amanda.....	Yarmouth	42	E. P. Greenwood	N. E. Harbour..	9	87 00
83434	Mary May	Barrington	20	Peter M. Crowe.....	Sandy Point.....	6	50 00
103181	Mayflower	Shelburne	26	Mark A. Vernon.....	do	5	51 00
100614	May Flower	do	11	Uriah Williams.....	W. Green Harb'r	4	31 00
103177	Mayflower	do	12	Alfred Swim.....	Lockeport	3	27 00
103173	Mabel	do	21	Jno. Mathews	Rockland	7	56 00
103175	Myrtle	do	10	Geo. L. Decker, sr...	Little Harbour..	4	30 00
83493	Mary C	Liverpool	80	Wm. McMillan.....	Lockeport	19	175 00
103182	Meta	Shelburne	18	Clifford Locke.....	do	5	43 00
90439	Oscar F	Barrington	18	Henry Purney.....	South Side.....	7	53 00
96977	Oriole	Shelburne	43	Clifford Locke.....	Lockeport	10	93 00
100820	Ranger	Barrington	11	Thos. C. Nickerson...	Doctor's Cove...	4	31 00
100319	Rob Roy	Yarmouth	12	Jethro Swim.....	Clarke's Harbour	4	32 00
92320	Rialto	Shelburne	46	A. E. Thorbourn.....	Sandy Point.....	8	86 00
77956	Speed	Yarmouth.....	13	Robert Nickerson...	Upper Wood's Harbour	2	23 00
90433	Ste. Anne	Barrington	11	Jno. W. Kenny.....	Clarke's Harbour	4	31 00
85390	Susan C	do	20	James F. Ross	Stoney Island...	8	60 00
100616	Sea Slipper.....	Shelburne	11	James Enslow	Green Harbour..	4	31 00
90894	Theresa	Yarmouth	18	Stanford Kenney.....	Clarke's Harbour	2	28 00
96961	Tivoli	Shelburne	24	Wm. J. Doane.....	Red Head	6	54 00
103179	Triby	do	31	Wm. McMillan.....	Lockeport	10	81 00
100811	Vesta Pearl.....	Barrington	40	N. J. Smith <i>et al.</i> ...	Cape Island	10	90 00
100608	Vesper	Shelburne	14	Geo. S. Decker, jr...	Little Harbour..	5	39 00
100611	Water Sprite	do	50	Colin C. Nickerson...	Lower Wood's Harbour	4	70 00
90430	Will Carleton.....	Barrington	80	Joseph A. Smith.....	Port La Tour	16	160 00
100812	Wyvern	do	25	Charles L. Swim	Clarke's Harbour	5	50 00
103183	Wren	Shelburne	18	Wm. McCarthy.....	Shelburne	5	43 00
77744	Whip-poor-will...	do	17	James Cook	Black Point.....	5	42 00
75722	Yuba	Yarmouth.....	15	Charles E. Crowell...	Port La Tour...	7	50 00

VICTORIA COUNTY.

69133	Susan	Halifax.....	17	J. D. McNeil.....	Ingonish.. ..	1	22 00
-------	-------------	--------------	----	-------------------	---------------	---	-------

YARMOUTH COUNTY.

94980	Aurore	Yarmouth.....	80	Leon D'Eon	West Pubnico...	18	170 00
80647	Annie M. Bell	do	64	Zacharie D'Eon.....	do	17	149 00
103051	+Carrie May.....	do	25	Henry T. D'Entremont	L. E. Pubnico...	4	46 95
94977	Civilian	do	80	Charles D'Entremont..	West Pubnico ..	18	170 00
85536	Circassian	do	80	A. F. Stoneman & Co..	Yarmouth.....	23	195 00
90871	Dora	do	63	do	do	17	148 00
103053	Eddie C	do	11	James F. Harding	Argyle.....	1	16 00
103066	Eddie J	do	23	Webster Hamilton...	Lower Argyle..	1	28 00
97036	Eva	do	10	Gabriel Bourke.....	Bourke's Cove ..	2	20 00
85551	Ethel	do	80	J. H. Porter & Co	Tusket Wedge...	18	170 00
90654	Flora	do	64	David D'Entremont...	West Pubnico ..	18	154 00
94972	Florence	do	11	Joshua Boudreau.....	Tusket Wedge...	4	31 00
90885	Georgiana.....	do	80	Henry Lewis	Yarmouth	20	180 00

+For 1895.

List of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*YARMOUTH COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
85554	Hazel Glen.....	Yarmouth.....	80	Arthur D'Entremont..	West Pubnico ..	22	190 00
80643	Hazel Dell.....	do	80	Parker, Eakins & Co..	Yarmouth.....	16	160 00
100327	Hattie.....	do	10	Robert Ellenwood.....	do	3	25 00
88581	King Fisher.....	do	47	A. F. Stoneman & Co..	do	6	77 00
90887	L'Etoile.....	do	48	J. H. Porter & Co...	Tusket Wedge..	13	113 00
80614	Louise.....	do	80	do	do	16	160 00
80632	Lumen.....	do	30	do	do	6	60 00
103059	Lady Bourque.....	do	11	Mandé Bourque.....	Sluice Point...	3	26 00
88596	M. A. Louis.....	do	64	Charles D. D'Eon....	West Pubnico ..	15	139 00
85539	Maggie Jane.....	do	12	Wm. Robbins.....	Port Maitland..	2	22 00
88583	Mary O'Dell.....	do	14	Levi Robicheau.....	Yarmouth.....	3	29 00
90659	N. A. Laura.....	do	59	Julien D'Entremont..	West Pubnico ..	17	144 00
90892	Nellie.....	do	59	J. H. Porter & Co...	Tusket Wedge..	10	109 00
85553	Onyx.....	do	80	Parker, Eakins & Co..	Yarmouth.....	18	170 00
100313	Souvenir.....	do	71	Nicholas D'Entremont	West Pubnico..	21	176 00
100323	Senora.....	do	80	Marc A. Surette	do	21	185 00
75724	Sea Foam.....	do	75	J. H. Porter & Co...	Tusket Wedge..	14	145 00
96962	Sunrise.....	do	18	James E. Crosby.....	Yarmouth.....	3	33 00
88589	Sanford.....	do	20	Wm. A. Killam.....	do	*	20 00
88597	Uncle Sam.....	do	80	James Amiro.....	West Pubnico..	20	180 00
90897	Wrasse.....	do	56	A. F. Stoneman & Co..	Yarmouth.....	16	136 00
90882	Will o' the Wisp...	do	51	do	do	16	131 00
90896	Wapiti.....	do	80	do	do	18	170 00

* Crew not entitled to bounty.

LIST of Fishing Vessels which received Fishing Bounty, &c.—Continued.

PROVINCE OF NEW BRUNSWICK.

CHARLOTTE COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							% cts.
103124	Addie B.	St. Andrew's. . . .	13	Arthur Ramsdell. . . .	White Head. . . .	1	18 00
94727	Aurelia	St. John.	22	James Scovil.	Grand Manan. . . .	3	37 00
83469	Austin P.	St. Andrew's. . . .	12	Eben Greenlaw. . . .	Deer Island.	4	32 00
100111	Bess.	Parsboro', N.S. . .	24	Frank Cassidy.	Lepreaux.	3	39 00
64011	Bee.	St. Andrew's. . . .	18	B. T. Fletcher.	Wilson's Beach. . .	3	33 00
88409	Carrie.	Digby, N.S.	12	Thos. A. Cook.	La Tête.	3	27 00
88290	Crusoe.	St. Andrew's. . . .	13	James Starkey.	St. Andrew's. . . .	3	28 00
59375	Cadet.	do.	19	Ethelbert Savage. . . .	Campobello.	5	44 00
35338	Caroline.	do.	18	Henry Stuart.	Deer Island.	5	43 00
92503	Defiance.	do.	17	Frank Calder.	Campobello.	3	32 00
103118	Della F. Tarr. . . .	do.	34	C. H. Greenwood. . . .	Wilson's Beach. . .	7	69 00
74326	Dreadnaught. . . .	Yarmouth, N.S. . .	19	Alfred Stanley, sr. . . .	Grand Manan. . . .	3	34 00
88280	E. B. Lane.	St. Andrew's. . . .	13	Fred. Tewsbury.	do.	2	23 00
80303	Exenia.	Windsor, N.S. . . .	18	Wm. F. Parker.	Beaver Harbour. . .	4	38 00
80882	Ella Mabel.	St. Andrew's. . . .	14	Walter Calder, jr. . . .	Campobello.	3	29 00
83202	Enchantress.	do.	10	Peter Dixon.	Grand Manan. . . .	1	15 00
94834	Flora Wooster. . . .	do.	22	Andrew McGee.	Back Bay.	3	37 00
88276	Falcon.	do.	12	Jno. F. Cronk.	Grand Manan. . . .	3	27 00
92511	Fleet Wing.	do.	11	Alden McFarland. . . .	do.	2	21 00
97150	Gleaner.	do.	13	Andrew McGee.	Back Bay.	1	18 00
94835	Georgie Linwood. . .	do.	25	Robert Barry.	Beaver Harbour. . .	5	50 00
59379	Gazelle.	do.	47	William Watt.	Grand Manan. . . .	8	87 00
59396	Gurtie Westbrook. . .	do.	16	James Cline.	Deer Island.	1	21 00
94839	Harrie.	do.	14	Wm. Tucker.	La Tête.	3	29 00
83463	Havelock.	do.	33	Wm. James.	Wilson's Beach. . .	5	58 00
103123	Indicator.	do.	11	Frank Ingersoll.	Grand Manan. . . .	2	21 00
103121	Island Girl.	do.	17	do.	do.	2	27 00
51965	John E. Dennis. . . .	do.	18	Alfred Stanley.	do.	4	38 00
83426	Louisa.	St. John.	16	Wm. Shaw.	Lepreaux.	3	31 00
59342	Lizzie S. McGee. . . .	St. Andrew's. . . .	14	Andrew McGee.	Back Bay.	4	34 00
88273	Lillian E.	do.	13	do.	do.	2	23 00
77965	Lybia B.	do.	18	W. & J. M. Calder. . . .	Campobello.	3	33 00
77766	Laconic.	Shelburne, N.S. . .	15	John Dixon.	Grand Manan. . . .	3	30 00
88407	Linnet.	Digby, N.S.	15	James Scovil.	do.	*	15 00
103117	Magaret.	St. Andrew's. . . .	49	Milton Eldridge.	Beaver Harbour. . .	12	109 00
88277	Maggie Jane.	St. John.	18	Thomas Bright.	Seely's Cove.	2	28 00
85442	Mystery.	St. Andrew's. . . .	14	Chas. Dixon.	Grand Manan. . . .	2	24 00
88402	Mizpah.	Digby, N.S.	53	Eben Gaskill.	do.	8	93 00
92514	Maggie Jane.	St. Andrew's. . . .	10	John Thomas.	do.	3	25 00
94837	Oiga.	do.	11	Thos. Richardson. . . .	Deer Island.	2	21 00
92518	Peril.	do.	18	Martin Eldridge.	Beaver Harbour. . .	3	33 00
75864	Roving Lizzie.	Weymouth, N.S. . .	11	Eben Calder.	Campobello.	3	26 00
75591	Rise and Go.	St. Andrew's. . . .	16	Wm. Sirls.	Wilson's Beach. . .	3	31 00
88272	Simeon H. Bell. . . .	St. Andrew's. . . .	14	Charles Dixon.	Grand Manan. . . .	3	29 00
88414	Trumpet.	St. John.	20	Geo. U. Wright.	Beaver Harbour. . .	3	35 00
59387	Telephone.	St. Andrew's. . . .	19	James Brown.	Wilson's Beach. . .	3	34 00
94832	Venus.	do.	42	Simon Brown.	do.	9	87 00
88282	Veritas.	do.	10	Simon Leonard.	Deer Island.	2	20 00
103111	Volunteer.	do.	13	A. W. Ingersoll.	Grand Manan. . . .	3	28 00
77969	Wave Queen.	do.	11	H. W. Foster.	do.	4	31 00
92512	Water Witch.	do.	11	Robert Main.	do.	3	26 00

* Crew not entitled to bounty.

List of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*

GLOUCESTER COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid. % cts.
100984	Alice.....	Chatham.....	11	Charles De Gruchy....	Caraquet.....	4	31 00
103279	Alice Maud.....	do.....	10	Peter Fiott.....	do.....	3	25 00
96739	Angeline.....	do.....	14	Octave Gionet.....	do.....	3	29 00
103085	Argentina.....	do.....	12	V. L. Lanteigne.....	do.....	3	27 00
103071	Anglesea.....	do.....	12	H. H. LeBoutillier....	do.....	3	27 00
100987	Arabi.....	do.....	12	Philip Rive.....	do.....	3	27 00
103769	Alma.....	do.....	10	Jno. B. Sirois.....	do.....	3	25 00
103081	Albatross.....	do.....	13	Thomas Ahier.....	Shippegan.....	3	28 00
103763	Alouette.....	do.....	10	do.....	do.....	3	25 00
103073	Anna.....	dc.....	11	W. S. Loggie.....	Caraquet.....	4	31 00
92419	Anna.....	do.....	12	Dosité Chiasson.....	Shippegan.....	3	27 00
100960	Annie M.....	do.....	11	W. S. Loggie.....	Caraquet.....	3	26 00
103009	Adeline Gladys....	do.....	12	Richard Young.....	Shippegan.....	2	22 00
72099	Adeline.....	do.....	12	Clément Lanteigne....	Lamèque.....	3	27 00
97194	Alika.....	do.....	12	Lange Paulin, sr.....	do.....	3	27 00
100983	Bee.....	do.....	11	Chas. De Gruchy.....	Caraquet.....	3	26 00
61431	Bee.....	do.....	11	Paul Noël.....	Lamèque.....	3	26 00
103589	Blenheim.....	do.....	13	Peter Fiott.....	Caraquet.....	3	28 00
100299	Blanchard.....	do.....	12	do.....	do.....	3	27 00
100780	Britannic.....	do.....	12	C. Hubbard.....	do.....	3	27 00
100975	Big Bear.....	do.....	10	Robt. Young & Son....	do.....	3	25 00
103072	Ben Hur.....	do.....	11	Richard Young.....	Shippegan.....	3	26 00
72079	Betsy.....	do.....	13	Sébastien Noël.....	Lamèque.....	4	33 00
100909	Blue Nose.....	do.....	11	Joseph Sewell.....	Caraquet.....	3	26 00
103271	Celia.....	do.....	11	Dom. Gallien.....	do.....	3	26 00
100774	Calliope.....	do.....	12	P. Rive.....	do.....	4	32 00
103585	Cerdric.....	do.....	14	do.....	do.....	3	29 00
100988	Cæsar.....	do.....	10	do.....	do.....	3	25 00
100971	Cyprian.....	do.....	11	Elie Sivret.....	do.....	3	26 00
100784	Charlotte.....	do.....	13	R. Young & Son.....	do.....	3	28 00
100789	Chazalie.....	do.....	11	do.....	do.....	4	31 00
100916	Cygnét.....	do.....	12	George Romeril.....	Paspebiac, P.Q....	3	27 00
101000	Condor.....	do.....	10	Thomas Ahier.....	Shippegan.....	3	25 00
103083	Corsair.....	do.....	10	do.....	do.....	3	25 00
100917	Dora.....	do.....	11	Geo. Romeril.....	Parpebiac, P.Q....	3	26 00
100915	Dawn.....	do.....	12	do.....	do.....	3	27 00
100999	Dove.....	do.....	11	T. Ahier.....	Shippegan.....	3	26 00
100913	Daffodil.....	do.....	10	do.....	do.....	3	25 00
103076	Dipper.....	do.....	11	W. S. Loggie.....	Caraquet.....	4	31 00
92412	Dollie Dutton.....	do.....	13	Richard Young.....	Shippegan.....	4	33 00
103590	Eliza.....	do.....	13	P. Fiott.....	Caraquet.....	3	28 00
100293	Eliza.....	do.....	15	Robt. Young & Son....	do.....	4	35 00
103090	Etna.....	do.....	11	P. Rive.....	do.....	3	26 00
100772	Estelle.....	do.....	13	do.....	do.....	3	28 00
100905	Evangeline.....	do.....	10	do.....	do.....	3	25 00
100786	Empress.....	do.....	12	Robt. Young & Son....	do.....	3	27 00
100787	Ethel.....	do.....	11	do.....	do.....	3	26 00
100998	Eagle.....	do.....	10	T. Ahier.....	Shippegan.....	4	30 00
100911	Emperor.....	do.....	10	do.....	do.....	3	25 00
96723	Enma.....	do.....	15	Ludger Duguay.....	Lamèque.....	3	30 00
96737	Elmina.....	do.....	11	Jacques Noël.....	do.....	4	31 00
61405	Fly.....	do.....	11	Alexr. McLaughlan....	Tracadie.....	4	31 00
100977	Fly.....	do.....	12	Chas. DeGruchy.....	Caraquet.....	3	27 00
96736	Fly.....	do.....	14	Richard Young.....	Shippegan.....	4	34 00
85699	Four Sisters.....	do.....	10	Marcel Caron.....	Caraquet.....	3	25 00
100782	Flying Foam.....	do.....	12	Robt. Young & Son....	do.....	3	27 00
103001	Falcon.....	do.....	10	Thos. Ahier.....	Shippegan.....	3	25 00
100912	Foam.....	do.....	10	do.....	do.....	3	25 00
103077	Fame.....	do.....	10	W. S. Loggie.....	Caraquet.....	3	25 00
83399	Fannie R. C.....	Halifax, N. S....	22	J. W. Windsor.....	Wilson's Point....	4	42 00
100298	Fisher.....	Chatham.....	12	Elie Chiasson.....	Lamèque.....	4	32 00
61445	Flavie.....	do.....	13	Theophile Duguay....	do.....	4	33 00

List of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*GLOUCESTER COUNTY—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
92418	Grip	Chatham ..	12	James Davidson	Tracadie	3	27 00
100968	Gem	do	11	Charles DeGruchy	Caraquet	3	26 00
96733	Gem	do	12	Richard Young	Shippegan	3	27 00
100778	Gambetta	do	12	C. Hubbard	Caraquet	3	27 00
100954	Gazelle	do	10	do	do	3	25 00
100919	Gazelle	do	12	Geo. Romeril	Paspebiac, P. Q. ..	3	27 00
100910	Gleaner	do	13	Luc Lanteigne	Caraquet	3	28 00
100993	Garfield	do	10	P. Rive	do	3	25 00
100964	Gladstone	do	10	do	do	3	25 00
100992	Great Mogul	do	11	do	do	3	26 00
100989	Gadiator	do	11	do	do	3	26 00
100790	Guiding Star	do	11	Robert Young & Son ..	do	3	26 00
103282	Gilnockie	do	11	do	do	3	26 00
103766	Genesta	do	12	T. Ahier	Shippegan	2	22 00
103886	Gipsev	do	20	W. S. Loggie	Caraquet	4	40 00
100906	Hotspur	do	10	Philip Rive	do	3	25 00
100994	Hercules	do	10	do	do	3	25 00
100903	Hope	do	12	Robert Young & Son ..	do	3	27 00
61425	Hope	New Carlisle, P. Q.	13	Geo. Romeril	Paspebiac, P. Q. ..	4	33 00
103765	Hirondelle	Chatham	11	T. Ahier	Shippegan	3	26 00
100956	Harold N.	do	12	W. S. Loggie	Caraquet	3	27 00
100997	Ivanhoe	do	10	T. Ahier	Shippegan	2	20 00
96724	Isabel	do	11	Pierre Noel	Lamèque	4	31 00
100965	Josephine	do	11	P. Rive	Caraquet	3	26 00
100969	John Bull	do	10	Joseph Sewell	do	3	25 00
103281	Japan	do	11	Robert Young & Son ..	do	3	26 00
103289	Jersey Lily	do	12	T. Ahier	Shippegan	3	27 00
100958	John B.	do	11	W. S. Loggie	Caraquet	4	31 00
100981	Kite	do	11	Charles DeGruchy	do	3	26 00
103288	Kite	do	10	Thos. Ahier	Shippegan	3	25 00
103283	Koh-i-noor	do	13	Philip Rive	Caraquet	4	33 00
100980	Lynx	do	11	Charles DeGruchy	do	3	26 00
103280	Lilly	do	11	P. Fiott	do	3	26 00
100951	Leo	do	13	Hyacinthe Lanteigne ..	do	3	28 00
103089	Lady Maud	do	11	P. Rive	do	3	26 00
100902	Lord Stanley	do	10	Robert Young & Son ..	do	3	25 00
100972	Lizzie D.	do	11	do	do	3	26 00
103003	Lark	do	10	T. Ahier	Shippegan	2	20 00
103075	Lilly Belle	do	14	W. S. Loggie	Caraquet	2	24 00
92413	Mary Jane	do	14	Theodore Savoie	Tracadie	3	29 00
88669	Morning Star	do	12	Gustave Gionet	Pokemouche	3	27 00
103278	Marie Celia	do	14	Lange Albert	Blue Cove	3	29 00
92403	Marie†	do	25	Ubalde Landry	Grande Anse	3	56 88
92403	Marie	do	25	do	do	4	45 00
103088	Max	do	10	Maxime Cormier	Caraquet	3	25 00
100300	Mikado	do	13	P. Fiott	do	3	28 00
100955	Majestic	do	10	C. Hubbard	do	3	25 00
100779	Mermaid	do	11	do	do	3	26 00
100781	Mary Louise	do	11	do	do	3	26 00
103768	Mayflower	do	13	H. LeBoutillier	do	3	28 00
103084	Mary Emma	do	11	Onesime Poulin	do	3	26 00
100295	Marie Louise	do	18	Joseph A. Poulin	do	4	38 00
100785	Midnight	do	12	Robert Young & Son ..	Caraquet	3	27 00
100957	Mary R.	do	12	W. S. Loggie	do	3	27 00
61447	Merida	do	13	André B. Aché	Shippegan	3	28 00
72100	Marie	do	11	Onésime Chiasson	do	4	31 00
100292	Marie Joseph	do	12	Lazare Gauvin	Lamèque	3	27 00
100991	MacMahon	do	11	P. Rive	Caraquet	3	26 00
100970	Nellie	do	11	Dom. Gallien	do	3	26 00
103284	Norandy	do	11	P. Rive	do	3	26 00
103005	Osprey	do	10	T. Ahier	Shippegan	4	30 00

† For 1895.

LIST of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*GLOUCESTER COUNTY—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							\$ cts.
103004	Oriole.....	Chatham..	11	T. Ahier	Shippegan.....	3	26 00
96740	Providence.....	do	13	Prosper Albert.	Caraquet.....	3	28 00
72076	Providence.....	do	12	T. Ahier	Shippegan.....	3	27 00
96732	Providence.....	do	11	J. L. Robichaud.....	do	4	31 00
100776	Patrick.....	do	11	P. Rive	Caraquet.....	3	26 00
100996	Parisian.....	do	10	do	do	3	25 00
100904	P. T. S.....	do	11	Thomas Sivret	do	3	26 00
103080	Ptarmigan.....	do	11	T. Ahier	Shippegan.....	3	26 00
103746	Petrel.....	do	12	do	do	3	27 00
100297	Palma.....	do	14	Oliver Duguay.....	Lamèque.....	4	34 00
100967	Queen.....	do	10	Robert Young & Son..	Caraquet.....	3	25 00
97191	Rita.....	do	12	Chas. DeGruchy.....	do	3	27 00
100979	Ranger.....	do	10	do	do	1	15 00
100908	Rosalie.....	do	10	Edward LeBoutillier..	do	3	25 00
100775	Red Gauntlet.....	do	11	P. Rive	do	3	26 00
100773	Rupert.....	do	12	do	do	3	27 00
100952	Replevin.....	do	10	Geo. Romeril.....	Paspébiac, P.Q..	3	25 00
103287	Raven.....	do	11	T. Ahier	Shippegan.....	2	21 00
103587	Romulus.....	do	19	W. S. Loggie.....	Caraquet.....	3	34 00
103586	Remus.....	do	17	do	do	3	32 00
103078	Reward.....	do	13	James DeGrace.....	Shippegan.....	4	33 00
103272	Red Weasel.....	do	11	Richard Young.....	do	2	21 00
103273	Russel.....	do	10	John M. Ward.....	Miscou Island..	3	25 00
96727	Ryse.....	do	11	Sinaï Aché.....	Lamèque.....	3	26 00
61438	Rosane.....	do	13	Aimé Duguay.....	do	3	28 00
100982	Snowdrop.....	do	11	Charles DeGruchy....	Caraquet.....	3	26 00
100978	Speedy.....	do	11	do	do	3	26 00
103761	Swing.....	do	11	P. Fiott	do	3	26 00
103767	Stella Maris.....	do	19	Luc Friolet.....	do	3	34 00
103010	Sarah B.....	do	10	J. Lanteigne.....	do	3	25 00
103087	Stanley.....	do	10	Théotime Poulin.....	do	3	25 00
100963	Stanley.....	do	10	P. Rive	do	3	25 00
103584	Saxon.....	do	13	do	do	3	28 00
100907	Sarah.....	do	10	Robert Young & Son..	do	3	25 00
100974	Sivret.....	do	10	do	do	3	25 00
100901	Sea Flower.....	do	12	do	do	3	27 00
100914	Sea Flower.....	do	11	Geo. Romeril.....	Paspébiac, P.Q..	3	26 00
100788	Sir Charles.....	do	11	Robt. Young & Son...	Caraquet.....	3	26 00
103286	Snipe.....	do	11	T. Ahier	Shippegan.....	3	26 00
103762	Swan.....	do	14	do	do	3	29 00
103006	Swallow.....	do	11	do	do	4	31 00
100961	Silver Moon.....	do	14	W. S. Loggie.....	Caraquet.....	4	34 00
96731	Sea Star.....	do	13	Joseph Savoie.....	Shippegan.....	3	28 00
100986	Swift.....	do	11	Fabien G. Chiasson...	Little River Shippegan.....	3	26 00
92408	Sarah A. W.....	do	15	Robt. J. Wilson.....	Wilson's Point..	3	30 00
100959	Sea Bird.....	do	10	André F. Aché.....	Lamèque.....	3	25 00
103008	St. Joseph.....	do	12	Adolphe Aché.....	do	4	32 00
74401	Sara.....	do	11	Nazaire Noël.....	do	4	31 00
100777	Teutonic.....	do	11	C. Hubbard.....	Caraquet.....	3	26 00
100918	Tickler.....	do	12	Geo. Romeril.....	Paspébiac, P.Q..	3	27 00
103082	Thrush.....	do	10	T. Ahier	Shippegan.....	3	25 00
96738	Three Brothers.....	do	12	Richard Young.....	do	3	27 00
103293	Two Brothers.....	do	11	Martin G. Wilson.....	Little Shippegan	3	26 00
100966	Von Moltke.....	do	11	Philip Rive.....	Caraquet.....	3	26 00
100995	Voltaire.....	do	10	do	do	3	25 00
103285	Valkyrie.....	do	12	do	do	3	27 00
103588	Vulture.....	do	13	W. S. Loggie.....	do	3	28 00
103274	Vesuvius.....	do	10	Geo. D. Mallet.....	Shippegan.....	4	30 00
100985	Wasp.....	do	12	Chas. DeGruchy.....	Caraquet.....	3	27 00
100953	White Wings.....	do	10	Robert Young & Son..	do	3	25 00
100973	World's Fair	do	11	do	do	3	26 00

LIST of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*GLOUCESTER COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
103079	Wren.....	Chatham.....	11	T. Ahier.....	Shippegan.....	3	\$ cts.
88663	William Sinclair. N.	do	17	W. S. Loggie.....	Caraquet.....	4	26 00
96735	White Fish	do	12	Joseph Savoie, jr.....	Lamèque.....	4	37 00
100920	Zephyr	do	12	Geo. Romeril	Paspébiac, P.Q..	3	32 00
							27 00

NORTHUMBERLAND COUNTY.

83105	Katie Bell.....	Richibucto.....	11	Edward Breaux.....	Neguac	4	31 00
92420	Mary Louise. . . .	Chatham.....	13	Donald Loggie.....	Church Point....	3	28 00

RESTIGOUCHE COUNTY.

94959	Winnie G. S.... .	Lunenburg, N.S.	26	Daniel McGregor	Dalhousie.....	5	51 00
-------	-------------------	-----------------	----	-----------------------	----------------	---	-------

ST. JOHN COUNTY.

88253	E. B. Colwell.....	St. John.....	19	Addison Thompson....	Dipper Harbour .	3	34 00
59373	E. M. Oliver.....	St. Andrew's ...	14	Charles Harkins.....	do	3	29 00
77783	Lost Heir.....	St. John.....	15	Henry Alston	Pisarinco.....	4	35 00
42089	Lily.....	St. Andrew's ...	10	Frank Campbell	Dipper Harbour .	2	20 00
52159	Mary E	St. John.....	21	Fredk. Buchanan.....	St. John	4	41 00
59322	Sea Flower	do	11	James Thompson.....	Chance Harbour..	3	26 00
80630	Vanity.....	Yarmouth, N.S.	11	Patrick Murray.....	Dipper Harbour .	3	26 00
97149	Winnie	St. Andrew's ...	12	Robert McLellan.....	do	2	22 00

LIST of Vessels which received Fishing Bounty, &c.—*Continued.*

PROVINCE OF PRINCE EDWARD ISLAND.

KING'S COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	Nc. of Crew paid.	Amount of Bounty paid.
							¢ cts.
69132	Belle of the Bay...	Guysboro', N.S.	20	David H. Gosbee	Murray River...	4	40 00
92675	Can't Help It	Pictou, N.S.	40	John Herring	Murray Har. S.	6	70 00
38335	Elizabeth	Arichat, N.S.	17	Daniel Hemphill	Georgetown	4	37 00
83196	Ethel Blanche	Pictou, N.S.	17	Wm. Reynolds	Murray Har. S.	4	37 00
100691	Frances E. Willard.	do	23	Benj. H. Herring	do	6	53 00
69109	Marcella Butler	Halifax, N.S.	38	John Hemphill	Georgetown	4	58 00
100696	Marion Emerson	Pictou, N.S.	30	Reuben Cahoon	Murray Har. S.	5	55 00
90639	Morell	Charlottetown ..	16	Edward Delorey	Brudenell	2	26 00
94667	Nettie M. G.	Halifax, N.S.	32	John Cahoon	Murray Har. S.	5	57 00
88350	Orion	Charlottetown ..	78	Daniel Walker	Georgetown	12	138 00
74160	Seabird	do	20	Joseph White	Cape Bear	4	40 00
90488	Wave	do	19	James Delorey	Brudenell	3	34 00

PRINCE COUNTY.

71310	Black Watch	Charlottetown ..	23	Benjamin Perry ..	Alberton	4	43 00
80928	L. H. Davies	do	33	Gallant & Pineo	Bloomfield	7	68 00
75891	May Queen	Chatham, N.B. ..	22	James L. Richards ..	Alberton	4	42 00
83096	St. Patrick	do	16	John White	Fortune Cove ..	5	41 00
94992	Sarah P. Ayer	Charlottetown ..	64	John Champion	Alberton	12	124 00
96926	Sea Foam	do	15	Edward Crossman	Lot 14	4	35 00

QUEEN'S COUNTY.

90476	Fanny	Charlottetown ..	26	Joseph Gallant	Rustico	5	51 00
92466	G. H. Gardiner	do	17	Ebenezer Marshall	North Rustico ..	4	37 00
96936	Katie and Ella	do	20	Jacob Van Buskirk	Charlottetown ..	5	45 00
11967	Onward	do	52	Alfred McLeod	French River	*	52 00
103592	Rosamond	do	18	Frank A. Churchill	Rustico	5	43 00

* Crew not entitled to bounty.

LIST of Vessels which received Fishing Bounty, &c.—*Concluded.*

PROVINCE OF QUEBEC.

GASPÉ COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner, or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							£ cts.
96766	Golden Rule.	Pt. Hawkesbury, N.S.	42	J. P. Savage.	Amherst, M.I. ...	8	82 00
94675	Success.	Halifax, N.S.	16	R. J. Leslie.	Halifax, N.S.	5	41 00

RIMOUSKI COUNTY.

69584	Marie Louise . . .	Quebec.	23	Louis Castonguay.	Sandy Bay.	3	38 00
-------	--------------------	--------------	----	------------------------	-----------------	---	-------

SAGUENAY COUNTY.

74270	Amarilda.	Quebec.	24	Cléophas Vézina.	St. Michel.	2	34 00
85756	Aristile.	do.	19	Philéas Vézina.	do.	2	29 00
100857	Alix.	do.	13	Alfred Tremblay.	St. Thomas de Montmagny. .	2	23 00
42436	Amelia.	Gaspé.	50	Paul Cormier.	Pt. Esquimaux. .	8	90 00
100463	B. C.	Quebec.	15	François Métivier.	Montmagny. .	2	25 00
61966	D. Cronan.	Halifax, N.S.	40	Peter LeMarquand.	Pt. Esquimaux. .	5	65 00
59909	Elizabeth.	Quebec.	27	Elisée Caron.	Sandy Bay.	3	42 00
80754	Eugénie.	do.	48	André Vigneau.	Pt. Esquimaux. .	6	78 00
85754	Florida.	do.	26	Charles Gasse.	Rimouski.	*	26 00
88469	George Clarke, jr. .	Arichat, N.S.	64	Luc Cormier.	Pt. Esquimaux. .	6	94 00
85750	H. B.	Quebec.	57	Hypolite Boudreau.	do.	10	107 00
100860	Hovington.	do.	17	Thomas Riverin.	Murray Bay.	3	32 00
66259	Katie E. Stuart.	Halifax, N.S.	54	James P. Buckle.	Bonne Espérance	4	74 00
103355	La Clerina.	Quebec.	20	Narcisse Levesque.	Notre-Dame Ile Verte.	2	30 00
55863	Maria Adelmina.	do.	13	C. Levesque.	do.	2	23 00
69380	Marie Anne.	Gaspé.	36	Charles Landry.	Pt. Esquimaux. .	8	76 00
103136	Marie Claude.	Quebec.	21	Ulric Couillard.	Sandy Bay.	2	31 00
100464	Marie Oliva.	do.	12	Horace Demeule.	Ile aux Coudres. .	3	27 00
100469	Marie Victoire.	do.	20	Alphonse Pedneaud. .	do.	4	40 00
69382	Marie du Sacré Cœur	Gaspé.	46	Paul Landry.	Pt. Esquimaux. .	6	76 00
100462	Mary.	Quebec.	19	Joseph Gagné.	Malbaie.	2	29 00
103358	Romeo.	do.	22	Louis Pineault.	Bic.	2	32 00
73026	Ste. Anne.	do.	20	Lazare Michaud.	Trois Pistoles. .	*	20 00
92334	Ste. Marie.	do.	53	Pierre Ouellette.	Quebec.	4	73 00
69591	Ste. Marie.	do.	37	Alex. Scherrer.	Pt. Esquimaux. .	5	62 00
100362	St. Louis.	do.	23	Alphée Bergeron.	Ile aux Coudres. .	4	43 00
80753	Stella Maris.	do.	51	Louis Cummings, sr. .	Pt. Esquimaux. .	8	91 00
75680	Sea Star.	do.	52	Dominique Cormier. .	do.	8	92 00
64873	Willie.	do.	36	Louis Gagnon.	Pentecost.	*	36 00
66727	Willow.	Halifax, N.S.	15	Auguste Boulet.	St. Thomas de Montmagny. .	3	33 00
100860	+Hovington.	Quebec.	17	Thomas Riverin.	Murray Bay.	2	36 84
103362	+Le Marcel.	do.	13	Benjamin Bergeron. .	Les Eboulements	3	33 80
66060	+P. Fortin.	do.	79	Israël Cornier.	Pt. Esquimaux. .	7	213 30

†For 1895. ‡For 1894. *Crew not entitled to bounty.

APPENDIX No. 3.

NOVA SCOTIA.

District No. 1.—Comprising the four counties of the Island of Cape Breton.
Inspector A. C. Bertram, North Sydney. C.B.

District No. 2.—Comprising the counties of Cumberland, Colchester, Pictou, Antigonish, Guysborough, Halifax and Hants.
Inspector Robert Hockin, Pictou.

District No. 3.—Comprising the counties of King's, Annapolis, Digby, Yarmouth, Shelburne, Queen's and Lunenburg.
Inspector L. S. Ford, Milton.

DISTRICT No. 1.

ANNUAL REPORT ON THE FISHERIES OF CAPE BRETON ISLAND, COMPRISING THE COUNTIES OF CAPE BRETON, INVERNESS, RICHMOND AND VICTORIA.

NORTH SYDNEY, C.B., 2nd January, 1897.

Hon. L. H. DAVIES,
Minister of Marine and Fisheries.

SIR,—I have the honour to transmit herewith the statistics of the fisheries of the Island of Cape Breton for the year 1896, together with synopses of the reports of the several local officers, and a detailed statement of materials used in the fishing industry.

Besides the usual comparative tables, there will be found embodied in this report statement showing at a glance the increase and decrease in the fisheries by counties compared with 1895; the average earnings by counties per fisherman for the present year; a comparison of yield of seven of the leading branches with the two previous years, and a table giving the number of lobster canneries in operation in each of the four counties for the present year, the number of persons employed and the total value of the season's pack.

In gathering these statistics, I have always impressed upon the several overseers the necessity of exercising the utmost care in obtaining their information from only reliable dealers and fishermen, so that the actual yield of the fishing industry be given to the country in these annual returns.

It will be observed by the following comparative table that there has been a decrease in the total yield :—

County.	Value, 1895.	Value, 1896.	Increase.	Decrease.
	\$	\$	\$	\$
Cape Breton.....	191,953 77	197,214 63	5,260 86	
Inverness.....	315,846 78	301,966 70		13,880 08
Richmond.....	379,193 23	343,721 75		35,471 48
Victoria.....	180,782 33	200,644 39	19,862 06	
	1,067,776 11	1,043,547 47	25,122 92	49,351 56
Decrease				24,228 64

The decrease in the value of the fisheries for 1896 may be attributed to three causes, viz., low market prices for leading articles of fish product; failure of the mackerel fishery and the shortage in the catch of herring. This decrease I predicted in my preliminary report, forwarded in November last, before the statistics were gathered. The following table contains statistics relating to the lobster fishing industry, as carried on in each of the four counties of Cape Breton Island :—

County.	Number of Canneries in Operation.	Number of Persons Employed.	Total value of the Season's Pack.
			\$
Cape Breton.....	14	515	62,728 68
Inverness	16	300	33,546 80
Richmond.....	17	503	72,055 20
Victoria.....	17	252	28,576 24
	64	1,570	196,906 92

There was a much larger number of canneries in operation in 1896 than in any previous year, and although there is an increase in the season's pack, the total yield per cannery is below the average of last year. From information already to hand, I learn that there will be a larger number of canneries operated in this district next season than in any previous year. The multiplying of these canneries threaten the extinction of this important fishery at no distant day. It would seem, therefore, that some further restriction is necessary to preserve this fishery than the present regulations afford. There is no illegal fishing carried on in this district after the close season begins. The regulations are, I believe, as well observed here as elsewhere. Still I have reason to believe that there are violations, not at the canneries, but when the fish are being taken from the traps. The average fisherman shows no inclination to preserve the fishery, and when he comes across a spawned lobster in the trap, he is liable to destroy the spawn. This is done by rubbing the berried part of the fish across the gunwale of the boat, thus removing every trace of spawn from the lobster. This is the most iniquitous practice adopted to evade the regulations. If the department would offer a reward in each district for the conviction of fishermen found guilty of this practice, I have no doubt it would restrict it to some extent. Considering the danger to this industry by overfishing, I am of the opinion that a license should not be issued to a new cannery in closer proximity than three miles of one previously in operation.

For instance, up to the end of the present season there was only one cannery operated at Little Bras d'Or Gut. Next season within a radius of two miles, if licenses are granted, there will be three canneries in operation, yet the fishing grounds there can only supply one cannery for an average season's pack. The following is the product of this fishery for the four past years :—

	Lbs. preserved.
1893.....	1,211,970
1894.....	1,055,795
1895.....	1,330,474
1896.....	1,406,478

Besides the above, the following returns show the quantity of fresh lobsters marketed during the same period :—

	Tons.
1893.....	39
1894.....	42
1895.....	3
1896.....	152

CODFISH.

This is the leading branch of our fishing industry, and is prosecuted more or less during the whole season by our shore fishermen. The following are the returns of this fishery for the four past years :—

	Cwts.
1893.....	98,871
1894.....	101,717
1895.....	76,285
1896.....	82,313

These fish were found scarce in the inshore waters up to the middle of September when they became more plentiful, and from that date till the end of December, there was excellent codfishing in all the districts. Why these fish continue to remain in deep water until the autumn season, is inexplicable. Some fishermen say that they are kept outside by the gurry thrown overboard by American fishing vessels. There is, evidently, better natural feed on the outside banks in mid-summer than in the inshore waters. The only way the local fishermen can overcome this is by adopting a larger size fishing craft than the average fisherman now uses.

MACKEREL.

This branch of the fisheries was the the poorest for many years in this district, as the following figures will show :—

	Brls. pickled.	Lbs. preserved.
1893.....	12,509	11,622
1894.....	14,619	10,160
1895.....	11,348	19,900
1896.....	9,706	6,900

The catching of thousands of barrels of these fish by American seining vessels, while the mackerel are on their way in June to the spawning grounds, must, of necessity, bring about the extinction of these fish. In the interests of the fishery, it would be better for Canadian fishermen to allow Americans fishing privileges in our inshore waters for the concession of abandoning the destructive method of purse-seining, at least until after the mackerel spawning season. By the failure of this fishery the past season, our fishermen have had their year's earnings considerably reduced.

HERRING.

The following comparative statement exhibits a considerable falling off in the pickled product, compared with the previous year :—

	Brls. pickled.	Lbs. fresh.
1893.....	22,017	227,000
1894.....	26,670	187,000
1895.....	37,349	118,340
1896.....	30,280	126,900

The cause of the decrease in pickled fish is owing to the failure of the mid-summer run of herring during the past season. Every season beginning with the month of July, a run of large, fat herring usually strike in in the bays and harbours in this district. This year these fish did not make their appearance in such large schools as the previous season.

While the fishermen were as fully prepared for this fishery as in former years, only a few barrels were captured in any of the districts.

Local fishermen contend that lobster traps frighten this run of fish from the coast. It does not seem, however, that this opinion of the fishermen is correct, as the spring run of herring, which is much inferior in all respects to the mid-summer run, made their appearance in our bays and harbours this year in great abundance. If traps would affect one run they would do so in the case of the other.

I am more inclined to believe that climatic changes have more to do with directing the course of the mid-summer herring than anything else. These fish are sensitive to such changes. In stormy weather they will leave the shoal waters of bays and harbours and take to the bottom where the water is deep.

The cause for the failure of the July run of these fish is to be found, I think, in the fact that about the time they were approaching the coast a heavy north-east storm diverted them from their usual course, thus depriving our local fishermen of one of the most remunerative branches of our fisheries.

SALMON.

As will be seen by the following figures this branch of the fisheries shows the largest percentage of increase during the past season, and this increase is made up by each of the four counties :—

	Brls. pickled.	Lbs. fresh and preserved.
1893.....	254	124,873
1894.....	336	88,834
1895.....	215	65,071
1896.....	408	120,276

Salmon were more plentiful from the third week in June until the last of October on the coast this year than in any previous season.

Most of the fish were taken by gill-nets in the coastal waters and in the inside tidal waters of harbours and bays. After the close season opened and when the autumn rains began, these fish entered the spawning grounds of upper waters in large numbers.

HALIBUT.

Compared with the past three years the returns this season exhibit more than an average catch in this branch :—

	Lbs.
1893.....	26,880
1894.....	115,693
1895.....	96,664
1896.....	111,312

I have no doubt this branch of the fishery is capable of much greater development. These fish are only sought after for local consumption and for this limited market the fishery is only prosecuted by a few fishermen. Halibut were found more plentiful on the inshore banks this season than the previous one.

ALEWIVES.

With the exception of the quantity of alewives consumed by the fishermen and farmers living adjacent the fishing districts, these fish are used more than any other for bait, particularly lobster bait. The following are the returns for the past four years:—

	Barrels.
1893.....	5,071
1894.....	4,967
1895.....	2,467
1896.....	2,541

It will be observed that there is a considerable decrease in the past two years compared with the two previous years. This branch was prosecuted fully as vigorously as in former years, but the fish did not enter the fresh water streams in as large numbers as they did previous to 1895. The cause of this is inexplicable.

OYSTERS.

In each of the four counties of this Island are to be found oyster beds, but the most extensive beds are situated in the basin of River Dennis in the county of Inverness. I fear that unless something is done to propagate the beds, as a commercial industry in a few years it will cease to exist. There is a decrease in this fishery this season of 318 barrels. This decrease is owing solely to the condition of the beds, oysters being found small and scarce. In a previous report I recommended an examination of these oyster grounds by the expert of the department, and I hope the department will order such an examination next season, with the view of cleaning up the grounds and transplanting.

MINOR FISHERIES.

While the smelt fishery shows an increase over 1895 of 22,672 pounds, the trout statistics exhibit a decrease of 19,115 pounds. About seventy per cent of the smelts caught were forwarded to the American markets, but in the case of trout they are of no commercial value, as none are exported.

All of the latter fish taken are used for home consumption and the method of fishing is solely by angling. Therefore it is most difficult for the officers in gathering statistics to get accurate information respecting the quantity of fish caught during the season. This is not the case with the smelt fishery, as these fish are exported by rail, and it is easy to find out the extent of each season's operations. With regard to both of these branches I think these fish are fully as plentiful to-day in our rivers and streams as they were ten or fifteen years ago.

REGULATIONS.

The fishery regulations were enforced as vigorously as in any previous year. Where violations have come to my notice I took immediate steps to punish the guilty parties. The fishery courts are looked upon with terror by poachers and are the means of preventing many violations.

SYNOPSIS OF FISHERY OVERSEERS' REPORTS FOR THE ISLAND OF
CAPE BRETON, 1896.

CAPE BRETON COUNTY.

Overseer Francis Quinan, of Sydney, reports an increase of 980 cases of lobsters as a result of the operations of four factories, an increase of two factories over the previous year. The lobster fishery opened well, but owing to storms in June and to the scarcity of fish towards the close of the season, the fishery was not so profitable to those engaged in this particular industry, as in the previous season. In the other branches he reports a large falling off in the catch of mackerel and summer herring, and a slight increase in cod, haddock, salmon and alewives. The fishery regulations were well observed during the season.

Overseer Alexander McDonald, of East Bay, reports an increase in spring mackerel and a total failure in the fall fishery. Also an increase in the catch of cod, haddock and trout, and a decrease in herring, lobsters and alewives. The lobster fishery suffered from severe weather, causing considerable destruction to lobster gear. In the early part of the season cod and haddock were found scarce on the inshore banks, but towards autumn these fish became more plentiful and good hauls were made. A large number of trout came into the various streams in his district this year from the sea, owing to there being more rain and consequently more water in the streams than in previous years. The salmon fishery in the lake waters is not vigorously prosecuted, and on the sea coast the catch was light. Excepting what is used for home consumption, the fish are marketed in Canadian cities, Halifax taking the largest quantity. The regulations were well observed throughout the season.

Overseer William Burke, of Mira Ferry, reports an average catch of cod and haddock, and a decrease in mackerel and herring. This decrease occurred in the leading fishing districts of Little Lorraine, Bauline, Mainadieu and Mira Bay. In all these districts the returns exhibited an increase in salmon. In the lobster fishery there were five more canneries operated than on the previous season, and the increase in catch corresponds to the increase in the number of canneries. This increase he accounts for by the fact that a considerable quantity of lobsters were caught in other adjacent districts and carried to these canneries. In all the other branches the catches are about the same as in the previous year. He is of the opinion that the presence of dog-fish has had a good deal to do with the falling off in the catch of mackerel and herring. Dog-fish were more numerous in the coastal waters of his district than in the previous year. Of all the catches, about 60 per cent of the salmon, 20 per cent of codfish and herring, 5 per cent of the mackerel, all the alewives, trout, eels, smelts, halibut and oysters are used for home consumption, and the balance shipped to Halifax for exportation. He reports that the close seasons were usually well observed.

Overseer Richard Hickey, of North Sydney, reports that with the exception of herring and mackerel, all other branches of the fisheries prosecuted in his district show an increase in catch over that of the previous year. The decrease in the herring fishery is owing to the total failure during the past season of the mid-summer run. Various reasons are advanced by local fishermen for the non-appearance of these fish this year in the coastal waters and bays as in former years, but it is impossible to attribute it to any local or avoidable cause. The shortage in the mackerel catch can be attributed to two causes, viz., scarcity of fish and a less vigorous prosecution of the fishery than in former years. The growing scarcity of those fish from year to year has been so marked that now the local fishermen will not go to the expense of fitting out for this fishery but to a very limited extent. The cause of the scarcity of mackerel is attributed solely to the destructive method of purse-seining by United States fishing vessels. The fish that escape the seining vessels are frightened off the coast, hence very few mackerel now come within the reach of our local fishermen.

The cod and haddock fisheries both show a slight increase in catch over last year, but owing to low market prices, the result of the season's work has not been by any means as profitable to the fishermen as was the preceding year. The oldest fishermen of the district never remember the prices for this staple article of fish product ruling so low as during the past year. This may be attributed chiefly to the fact that large quantities of bounty-fed fish from French St. Pierre were this year disposed of in our provincial markets. This is a new hardship that our fishermen are compelled to face, and it is feared that if the evil continues the codfishing industry in Cape Breton will become so unprofitable that a very large number of those now engaged in this occupation will be obliged to abandon it entirely and take up other pursuits. The lobster factory in his district last season did a very successful business. The weather during the greater part of the season was most favourable for those engaged in the industry and both fishermen and packers enjoyed a successful season. Next year three factories instead of one will be in operation in his district. The lobster fishery is now one of the most important branches of the fisheries prosecuted in his district. The fishermen are paid cash for lobsters delivered at the canneries and this induces quite a number to take up this particular branch, especially as the decline in the market prices of dry and pickled fish of late years has made the cod and herring fishery less remunerative than in former years.

The minor branches of the fisheries were profitably prosecuted in his district last season and all show good returns compared with the several preceding years. The fishery regulations were well observed. No violations were reported, and he is pleased to say that the fishermen of his district are well disposed to be governed by the regulations.

INVERNESS COUNTY.

Overseer D. F. McLean, of Port Hood, in his returns for 1896 gives an increase catch of herring, cod, hake, haddock, salmon, trout, eels, squid, halibut and bass; and decrease in lobsters, alewives, and mackerel. The only cause he can assign for the decrease in the last three named branches was scarcity of fish. In his district the fishery was vigorously prosecuted in each branch during the year, and as a result large catches of herring, cod, hake and haddock were made. He estimates the quantity of fish used for home consumption at about 15 per cent of the whole catch; about 50 per cent sold in Canada, and the remaining 35 per cent exported to Europe and the United States. Five lobster canneries were in operation in his district during the past season—all operating under licenses. The Government labels were affixed to each case packed, and initialled in almost every instance. Dog-fish were on the coast in abundance, particularly during the autumn fishery, and as usual doing considerable damage to the fisheries and fishing gear. The close seasons have been well observed throughout the season. The Saw-dust Act was duly observed so far—a non-compliance with this particular statute would prove injurious. There are no fish-ways in the district under his supervision, nor does he consider it necessary to have any therein. One trap-net under license was set at Port Hood this year; fishing in connection therewith was a total failure. The operations during the season resulting as follows:—

Kind of Fish.	Quantity.	Value.
		\$ cts.
Mackerel	2 brls.	24 38
Herring	1½ "	7 20
Cod and Haddock	665 lbs.	4 25
Squid	3,500 "	22 60
Total		\$58 43

The cost of the license was \$40.00, so that trap-net fishing was not a paying speculation in his district for the year; while other net fishing, trawl fishing, and hand-line fishing proved quite remunerative to fishermen for the season just closed.

Overseer James Coady, of Margaree Forks, reports an increase in salmon in his district of 16,685 lbs. The increase he attributed to the season being particularly favourable, the water being high in the rivers and salmon were found in abundance in the tidal waters at the mouths of rivers where they were taken by nets. Large numbers ascended to the upper waters of the rivers, particularly at Margaree. He also reports an increase in trout. The mackerel and herring statistics give a decrease of over 50 per cent as compared with the previous year. The cause for this decreased catch was scarcity of fish. There is a slight decrease in lobsters, but to those engaged in this branch the fishery was more remunerative than in the previous year. The cause of the decrease was owing to their being one factory less in operation. In other branches of the fishery the catch was about an average one. The close seasons were fairly well observed; those found violating the law were summoned before the fishery court and convicted. About 15 per cent of the fish taken was used for home consumption, while the balance was marketed at Halifax.

Overseer David Ross, of North East Margaree, reports a decrease in the catch of all the leading branches. In herring there was a decrease of 871 brls., in mackerel of 1,557 brls., a decrease in the catch of cod of 2,088 qtls., in lobsters of 1,744 cases. As the fishery in all its branches was fully as vigorously prosecuted as in former years, he can only account for the decrease by the fact that the fish were scarcer during the season on the coast. The surplus of codfish and herring were marketed in Canada, while the entire catch of lobsters and mackerel were exported to the United States. The violations of the regulations were promptly reported to the Inspector, and the accused convicted in fishery court.

Overseer Lewis McKeen, of Mabou, reports an increased catch of cod and haddock in his district over the previous year. In the Autumn months fish were exceptionally plentiful owing to the abundance of squid. The mackerel fishery was a failure. This fishery has been falling behind year after year, so that during the past two years the local fishermen paid very little attention to its prosecution. Herring, during the spring and mid-summer months was a failure, but towards autumn this fishery improved and good hauls were made. Lobsters appeared on the coast earlier than usual, the first catch being on the 27th of April and up to the 25th of May this fishery was fairly good, but during the month of June and up to the 10th of July, lobster fishermen were unable to prosecute this branch of the industry successfully owing to the scarcity of bait. The returns show, however, an increase over the previous year of 18,432 lb. cans. This increase may be attributed to the fact that two more canneries were operated. In the first part of the season the salmon fishery opened well with these fish unusually plentiful on the coast, but stormy weather in July did much damage to nets and thus interfered with the fishery. Trout, smelts and eels were an average catch and were used for home consumption. Referring to the regulations, *Overseer McKeen* states that the guardians find it difficult to prevent the Indians from poaching. He thinks that guardians should be provided with dark lanterns to detect poachers at night.

Overseer William Aucoin, of Eastern Harbour, reports a decrease in the cod-fishery, mainly owing to unfavourable weather. In the first part of the season the lobster fishery was not vigorously prosecuted owing to stormy weather, but towards the close of the season this fishery improved. The salmon fishery was an average one. The products of the fisheries which were not used for home consumption were marketed in Canadian and foreign markets. The regulations were well observed.

RICHMOND COUNTY.

Overseer Duncan Cameron, of St. Peters, reports that during the fishing season of 1896 there were 3 vessels and 68 boats, with 103 men more, engaged in the fisheries than in the previous year. Notwithstanding this the increase is only noticeable in the catch of 1,025 brls., of herring, 363 brls. of mackerel, 11,900 lb. cans of lobsters and 700 qtls. of haddock. The regulations were well observed.

Overseer Alfred Lenoir, of Arichat, reports a decrease in the fisheries in his district over the previous year. The lobster fishery opened well and continued good during the months of April and May, but in June and July lobsters became scarce and many taken were found soft shelled. Most of the factories closed in June. The returns exhibit a considerable decrease. The spring mackerel fishery was a total failure and only about fifty barrels were taken in the fall in his district. The mid-summer or July herring fishery was better than last year, but the August and September fishery was light. The cod and haddock fishery was an average catch. This branch of the industry is prosecuted by the fishermen throughout the season. The local fishermen attribute the failure of the mackerel fishery to destructive purse seine fishing. Owing to the decreased catch and low price of fish, the fishermen are not so well provided for a long winter as in previous years.

Overseer Arthur Brymer, of L'Ardoise, reports an increase of the following branches in his district over the previous year, viz.: mackerel, codfish, halibut, pollock, salmon, lobsters, alewives and eels; and a decrease in herring and haddock. He also reports an increase in the yield of fish oil of 379 gallons. He assigns the decrease in herring to the presence of lobster traps during the herring fishing season. Codfish were plentiful, which accounts for the increased catch. The increase in the lobster yield is due to there being two additional factories operated. There are two fish-ways in good order and no saw or grist mills.

VICTORIA COUNTY.

Overseer Chas. L. Campbell, of New Campbellton, reports a fairly good fishing season in his district. There was an increase of 45 brls. pickled salmon, 2,460 lbs. canned salmon, and 1,320 lbs. of fresh salmon, also 275 lbs. herring, 34,558 lbs. cans of lobsters, 38 cwt. of hake, 16 brls. of eels, 1,150 lbs. of trout, 5,790 lbs. of halibut, and 138 brls. of squid; and a decrease of 592 brls. of mackerel, 95 cwt. of codfish, 770 cwt. of haddock, 85 brls. of alewives, and 20 brls. of oysters. Though there was an increase in herring, they were mostly spring herring, and the greater portion of them was used as bait by lobster fishermen. The mid-summer herring seems to have forsaken the shores, very few having been taken this season, and in some places none at all. Many fishermen are of the opinion that they are frightened off by the number of lobster traps that line the shore. He is unable to assign any direct cause for their not appearing as in former years. Salmon were more numerous, especially at Middle Head, where quite a number of small sized fish were caught. This is attributed to the salmon fry which had been placed in the Clyburn River from the Sydney Hatchery. There has been an increase of 88 per cent in the catch of lobsters over last year. This branch of the fishery is steadily increasing and is now one of the most remunerative for the fishermen. There were seven canneries in operation in his district during the past season. Codfish show a slight decrease. In the early part of the season these fish were very scarce on the shore banks, and at one time it was feared that cod fishermen would not be able to procure their supplies for the winter, but the fall fishing was excellent, though prices ruled low. Haddock also show a decrease; the catch being about half as large as last year. Dogfish were again very numerous, much to the detriment of the fishermen, who were in many cases compelled to take their nets ashore to save them. These fish drive off the other kinds of fish from the inside grounds. More salmon and halibut were canned this year than formerly. This branch is steadily increasing. All the herring taken this year were used for home consumption and bait. About 90 per cent of the season's catch of codfish was sold in Canada; chiefly in Halifax and North Sydney. All the catch of lobsters was shipped to Halifax. The close seasons were well observed. There are no mills or fish-ways on any of the rivers or large streams in his district. There were two fish-traps in operation at Black Head, Englishtown, this season. They were not very remunerative to their owners.

Overseer William Hellen, of Cape North, reports an increase of 148 brls. of mackerel over the previous year. These fish were very plentiful in August and first

of September in Aspy Bay and Bay St. Lawrence. They were exceptionally large, averaging 130 to 140 to a barrel. He also reports an increase of 8,154 lbs. cans of lobsters. This fishery was more vigorously prosecuted last season than during the past few years. Salmon also were more plentiful and the returns give an increased catch. There was a decrease in the catch of cod of 545 cwts. This branch of the industry was not so vigorously prosecuted in June and July as formerly. The herring fishery in his district was a total failure and the fishermen attribute this failure to the presence of lobster traps in the water. The halibut and haddock returns give a slight increase over the previous year. There were 220 more seals killed in his district by shore fishermen than last season. Dogfish made their appearance on the coast and as usual were destructive to fishermen's gear. Their presence militated particularly against the fall mackerel fishing, as fishermen would not put their nets out while they were on the coast. About 90 per cent of the season's catch of fish was marketed in Canada; the remainder being used for home consumption. The fishery regulations were well observed. The only cases which came to his notice were reported and the offenders summoned to the fishery court. The saw-dust regulations were observed. There are no fish-ways in his district, and none are required.

Overseer Daniel McCharles, of Middle River, reports an increase in the catch of salmon, herring and cod; and a decrease in mackerel. The other kinds of fish were about an average catch. About 75 per cent of the season's catch of fish was exported to Halifax and the balance used for home consumption. There are no fish-ways in his district, and the saw-dust regulations were well observed.

I have the honour to be, sir,

Your obedient servant,

A. C. BERTRAM,

Inspector of Fisheries.

DISTRICT No. 2.

ANNUAL REPORT OF THE FISHERIES OF DISTRICT No. 2, OF NOVA SCOTIA, COMPRISING THE COUNTIES OF ANTIGONISH, COLCHESTER, CUMBERLAND, GUYSBORO', HALIFAX, HANTS AND PICTOU.

PICTOU, 2nd January, 1897.

Hon. L. H. DAVIES,
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit my annual report of the fisheries in District No. 2, province of Nova Scotia, together with tabulated returns, showing the quantities and values of each kind of fish caught, as well as comparative tables showing the increase and decrease of the catch of each kind of fish.

The estimated value of the total catch for the past season is \$1,245,463, as compared with the estimated value of the catch for 1895 (\$1,429,782), exhibits a decrease of about 13 per cent.

Glancing at the returns for this district from the year 1876 to the present, I find that in none of the intervening years has the yield ever been so small.

The decrease, compared with 1895, is chiefly in the herring fishery, the increases and decreases in the other fisheries about balancing.

Of the anadromous fishes the fluctuations are as follows :

Salmon, a decrease of.....	9 per cent.
Shad, do	13 do
Smelts, do	8 do
Alewives, an increase of.....	8 do
Of the deep-sea fish, the catch of	
Halibut shows a decrease of.....	30 per cent.
Cod do an increase of.....	$\frac{1}{2}$ of 1 do
Hake do a decrease of.....	30 do
Pollock do an increase of.....	33 do
Haddock do do	75 do

Comparing the catch of the whole cod family with that of last year, there is an increase of about 13 per cent.

SALMON.

On the Atlantic coast, and rivers flowing into the ocean, the returns show an increase of 30 per cent, while in the Bay of Fundy waters of the district there is a decrease of 36 per cent. On the Straits of Northumberland the catch is nearly equal to that of last year.

In the protection of this fishery the following seizures were made: Five nets by the guardians on River Philip, Cumberland; one net by the guardian on Waught River, Colchester; one net by the Guardian of Middle River, Pictou, and two persons convicted of illegal fishing.

One net by the guardian on East River, Pictou; one net seized by the guardian and one person fined for illegal fishing by the guardian on Sutherland River, Pictou.

One large net seized by the inspector in the Straits of Northumberland.

It may be well to record the fact that during the months of October and November, owing to heavy rains, the rivers were kept brim full, and the spawning salmon could not easily be molested; it is, therefore, expected that the results will be beneficial to the future of the fishery, particularly if May and June, of the year 1897, have the usual rainfall.

SHAD.

There is a decrease of ten per cent from last year's catch in this fishery—nineteenths of all these fish taken in this district are from the Bay of Fundy waters,—the returns since 1889 from that portion being as follows:

1889.....	535
1890.....	750
1891.....	1178
1892.....	1811
1893.....	746
1894.....	981
1895.....	1185
1896.....	1079

Twenty years ago the average catch of shad from the same locality was about seven thousand barrels per annum.

Of the 1,079 barrels returned this season, 41 barrels were caught in the Shubenacadia River during the spawning season of the fish

ALEWIVES.

The returns show an increase over the catch of last year of eight per cent, but that was below the average. The catch of the present year is about an average for the past ten years.

HERRING.

There is a decrease of about forty per cent from the catch of last year.

The catch of 1895 was the largest since the district was set off; the catch of 1896 is the smallest.

MACKEREL.

There was a good catch of spring mackerel, particularly along the Guysboro' coast, but very few were taken in the fall. The result as a whole has been an increase over last year's catch.

LOBSTERS.

There is a decrease of 15 per cent compared with last year, while the number of traps set was about 15 per cent more than was used for 1895.

This is the smallest yield of any year since this district was set off.

The decrease was chiefly on the Atlantic coast fishery; on the Straits of Northumberland the yield was about the same as last year.

There is one factor which requires establishment with regard to this fishery, namely, the extent of the coast waters which is their habitat. I have been credibly informed that they are to be found 40 and 50 miles from the coast, and if such be the case; and there are the same relative quantities as frequent the shores; then the future of the fishery is not so precarious as some suppose, for it is seldom that traps are set at a greater distance than three miles from the coast.

From the reports of the overseers, I believe that the close season has been better observed during the past year than it has since the establishment of canneries.

The following is a synopsis of overseers' reports:—

Overseer John McDonald, of Antigonish, says that owing to heavy storms at the beginning of the fishing season many of the fishermen lost all their traps and before they were replaced the best run was over.

Of the herring fishery he says that had the prices been more remunerative double the quantity would have been taken, but when the fish come on that part of the coast they are not usually fat.

The very few mackerel taken were by large boats well supplied with many good nets which they set five and six miles from land.

The catch of cod was small, and thirty per cent of those taken were caught in the month of November.

Some of the fishermen have provided large boats for the prosecution of the hake fishery which enable them to go many miles from land, so that this year the returns from this fishery are larger.

The catch of haddock was equal to that of last year.

Alewives were remarkably plentiful during the season that they ascend the rivers of the county.

He urges the construction of fish-ways upon the dams in the rivers of the county.

Overseer McQuarrie, of Sherbrooke, Guysboro', says that the increase of 50 per cent in the catch of salmon, was owing to the fish being more numerous, for the means of capture and the efforts put forth were the same as usual.

Summer herring did not appear, and the few that were to be taken in the fall were not looked after because they are not so good as those taken in the summer, and the prices do not repay the labour and material.

Codfish seemed as plentiful as usual, but the weather was extremely unfavourable until late in the fall.

The lobster regulations are the most difficult to enforce, but good work was done by the "Vigilant" (cruiser) some times at the risk of the life of the crew.

Quite a number of fish-ways are much needed in his division, and he urges their construction as indispensable—indeed without such fish-ways the other part of the protective service seems out of joint.

He urges the clearing of a brook at Smithfield; this matter was noticed in his report last year. The sum of twenty dollars would be necessary to clear the debris in the river and allow fish access to their spawning grounds.

Overseer Gaston, Halifax County, reports a slight increase in codfish and salmon, but a decrease in herring, mackerel, haddock and pollock.

An average catch of lobsters, not so many canned, but more shipped alive.

Only one case of illegal fishing came to his knowledge, he searched the premises of the party suspected but found nothing to convict. A number of traps were found set and destroyed, but the owner could not be found; he destroyed the traps.

There are two fish-ways in his division in good repair, another requiring repairs.

Overseer George Rowlings, Musquodoboit Harbour, says the catch in his division, was about the same as last year excepting herring, in which there was a considerable shortage. After June, fish were scarce until late in the fall. Cod were unusually plentiful from November 10th to December 10th.

The close seasons were well observed. That of the lobster, having been better observed than any year in the history of the fishery. The chief difficulty is the live lobster trade, some fishermen have their traps in the water before the season opens in January, and the cruisers are not on the coast. If winter fishing is allowed, there should be cruisers on the coast until the 31st of December.

Overseer J. H. Bartlett, Terrence Bay, says the mackerel fishery in that part of the county has been a failure, chiefly because they did not in the fall "trim the shore," the fishermen in that locality depending chiefly upon drag seines to take this fish. There were evidently large quantities of mackerel, but for this reason very few were taken.

Herring were plentiful in some localities, but poor.

Salmon were more plentiful than for a number of years past.

Lobsters are decreasing, and it will not be many years before they are extinct. There is considerable winter fishing upon that part of the coast, so that the season is too long, the fishery being vigorously prosecuted from 1st January to 1st July.

Taking the year as a whole, the fishery business has been deplorable; on parts of the coast it has been the worst in the recollection of the oldest fishermen.

Numbers of families moved to the city to get through the winter.

Dogfish continue along the coast, not only eating up what fish may get into the nets, but destroying the nets also.

About 250 barrels of "whiting" were taken at Terence Bay for lobster bait.

Overseer J. R. Mosher, of Hants County, reports there were more shad caught than last year, but it was owing to a more vigorous prosecution of the fishery. There is a decrease in the shad fishery every year, owing to the spawning shad not being protected in the spring.

Overseer J. W. Davison says: For a number of years he has been forwarding discouraging reports as regards the catch of shad, the principal fishery in that locality, and he regrets that he has no better story to tell for the past season, this year's catch has fallen considerably short of last year.

Salmon were not as plentiful as last year. He believes that the decrease in shad is almost altogether owing to the fact that the gravid fish are caught in the Shubenacadie River at the time they are frequenting those waters for spawning purposes.

There should be a close season for shad at the time the fish are going up the rivers to spawn.

Overseer Pollock, Colchester, says that in the Stewiacke River (a tributary of the Shubenacadie) more shad and salmon were caught than last year, but not so large a catch of alewives. The fish were plentiful, but the demand (for bait) was not as great as other seasons.

Overseer McQueen, Pictou, says herring and cod were an average catch, but that of salmon was less than in 1895. There were several attempts at poaching salmon in the close season on Sutherland River, and he gave it his personal attention; succeeded in identifying and fining one person for fishing with torch and spear. The guardian took a net set in the river for salmon.

Overseer McPhie says there was a decrease in the catch of salmon.

There was some poaching of salmon when in the rivers by persons disguised at night, but they escaped arrest and identification.

Salmon have little chance of getting past the new wing dam, lately constructed on Barneys River.

I have the honour to be, sir,

Your obedient servant,

ROBERT HOCKIN,

Inspector of Fisheries.

DISTRICT No. 3.

ANNUAL REPORT ON THE FISHERIES OF DISTRICT No. 3, OF NOVA SCOTIA, COMPRISING THE COUNTIES OF YARMOUTH, SHELBURNE, QUEEN'S, LUNENBURG, KING'S, ANNAPOLIS, AND DIGBY, FOR THE YEAR 1896, BY INSPECTOR L. S. FORD.

MILTON, 2nd January, 1897.

To Hon. Minister of
Marine and Fisheries.

SIR,—I have the honour to submit the following annual report of the fisheries of District No. 3, province of Nova Scotia, for the year ending 31st December, 1896, together with the usual fishery statistics and reports of the officers under my supervision.

The total value of the catch of fish in my district amounts to \$3,781,884, which, I am pleased to report, shows an increase over that of last year, as follows :

Value of product, 1895	\$3,715,573
do do 1896.....	3,781,884
<hr/>	
An increase of.....	\$ 66,311

This surplus, though comparatively slight, is encouraging, as it is general, and not ascribed to any unusual improvement in one species of fish.

MACKEREL.

As a rule, this fishery was a failure. For some cause not yet apparent, parts of our coast, where these valuable fish once seemed abundant, are no more frequented by them. The importance of this fishery to our province should give its comparative failure a prominent place in the consideration of your department.

COD.

Speaking generally, the Grand Bank fishermen have done well, but the boat shore-fishing has barely held its own.

It cannot longer be ignored that the shore fisheries are falling off year by year. Many more or less plausible reasons are given for this, but the most probable is that our bays and harbours are over-fished. That is, the natural increase of the fish does not meet the annual drain by capture and waste of ova.

SALMON.

The salmon yield was above the average catch, and I have good reasons to state that, with continued proper protection, our rivers and lakes will again teem with that sporting fish.

The mill-owners' claim, "that the lumber interest is of more importance than the salmon and gasperaux fisheries," should not be entertained for a moment. There is no necessity for the destruction of either. Except in a very few rivers where the saw-dust covers the spawning grounds, it, in my opinion, does the fish no injury. Had the mill-owners allowed these fish free passage through their dams, the saw-dust question, as detrimental to fish culture, need not have been raised to-day.

GASPERAUX AND SHAD

Have yielded an average catch. The gasperaux labours under the same disadvantage as his aristocratic neighbour the salmon. Both have been debarred from an entrance to the lakes by mill dams, and, consequently, have left some of the rivers altogether. Stringent measures are being used to get them back again, with good effect, in some cases.

HERRING.

The scarcity of herring the present year will, no doubt, tend to increase their price, when more of them will be caught the coming season.

LOBSTERS.

The lobster business, especially the exportation of live fish, has been vigorously prosecuted. The county of Shelburne alone exported over 3,000 tons of live lobsters to the United States. It must be apparent to all engaged, that this important industry is not going to stand such a strain for many years longer.

The catch averages year by year should not deceive us. It takes more traps, more men and more area each year to produce the same amount of fish. Despite all the care taken by the officers, large numbers of short lobsters are destroyed by the fishermen.

Heroic measures will have to be adopted if this important business is to be retained as one of the commercial interests of the province.

I would again call the attention of your department to the necessity of better regulations in regard to the American lobster smacks, that come into our small harbours, and buy everything that comes, regardless of size or sex. In my opinion they should not be allowed a clearance without a certificate from a fishery officer. A small sailing craft, that could be run by a couple of hands, placed at the disposal of the officers, in some convenient harbour, would be of great help to watch those parties.

FISH-WAYS.

Many of our rivers are now fairly filled with passes, but there are several still unprovided; notably, the east branch of Bear River, Salmon River and the Meteghan, all in Digby Co.

Gordon River, Shelburne, is to have one on an entirely new model, built of stone and cement, of which I shall report fully when completed.

On the whole, our fisheries have been fairly remunerative this season, but more stringent regulations are needed in almost every branch if the industry is to be permanent, and not destroyed, as threatened at present.

SYNOPSIS OF OVERSEERS' REPORTS.

LUNENBURG COUNTY.

Overseer David Evans, of Chester, states that the mackerel fishery was almost a total failure. This fish did not enter the bays and harbours of this district, but passed the coast beyond the reach of our fishermen. The catch of herring exceeds the very large catch of last season. The run of salmon was larger than last year, and more were captured. The increase in the catch of cod is largely due to the failure of the mackerel; the disappointed fishermen then turning their attention more to cod-fishery. More lobsters were packed than last year, owing to the large price paid to the fishermen by the packers. The close season was fairly well observed.

Overseer W. M. Solomon, of West La Have, reports the catch of salmon as far exceeding that of previous years, owing no doubt to the manner in which the streams have been protected. Trout, alewives, whitefish and smelts gave an average yield. The catch of deep-sea fish, including cod, haddock, pollock and halibut exceeds that of last year, but that of hake is so slight that it is scarcely worth mentioning. The North Bay fishermen of this district rather better succeeded than last year. Our Labrador fleet did not fare so well, many of them having missed by going too far north. Mackerel and herring have been unusually scarce in this district. Last year the catch was small, but this season it is still worse. The lobster industry has been successful, and the regulations governing the same fairly observed. The rivers under his charge are in a more satisfactory condition than ever before. All the fish-ways are in a fairly good condition, excepting a few which will be looked after during the dry season next summer.

QUEEN'S COUNTY.

Overseer J. N. Freeman, of Liverpool, reports a very unfavourable fishing season. The hook and line fish being particularly below the average. Herring have unusually avoided our harbour; and the appearance of mackerel barely enough to assure our fishermen that this valuable fish has not altogether deserted our waters. Salmon were abundant compared with previous years. Alewives show a reduced yield.

SHELburne COUNTY.

Overseer W. J. McGill, of Shelburne, states that the catch of codfish is better than that of last year. The bankers did extra well, and the returns will show quite an increase. Mackerel showed no improvement on last year. Herring about half an ordinary supply. Lobsters show an increase over last year, both as to exportation of live fish and the canned article. There is a heavy drain on this fishery, but it appears to hold its own fairly well. Salmon and alewives show rather an improvement over the previous season.

Overseer E. S. Goudey, of Barrington, writes: Only one vessel from this district fished on the banks and secured a fair supply of fish. The shore fishermen did fairly well, but scarcity of bait prevented better returns. Herring were plentiful, and large quantities were caught and sold at remunerative prices. Salmon were quite plentiful and good prices were obtained for them. The trap-net men did a good business in mackerel this year. These fish shipped in ice were in great demand at fair prices. Lobster fishing was very profitable to the fishermen, larger quantities were taken, and the prices averaged more than any previous season. The law was well observed.

YARMOUTH COUNTY.

Overseer John A. Hatfield, Argyle, says that nearly all kinds of fishing gave a fair result. More mackerel were caught in traps than last year. Salmon also yielded more. An increased quantity of lobsters at better prices is reported. Law fairly observed where close watching prevailed. River fishing was fair and seems improving.

DIGBY COUNTY.

Overseer T. C. Shreve, of Digby, reports the catch of fish this year better than in previous years. The fishing was vigorously prosecuted, and the fishermen were rewarded with larger returns of their labours. The product of cod and haddock was about equal to that of last year, but that of hake and pollock were largely in excess. The improvement is owing to a better supply of bait and more favourable weather. Sixty per cent of the fish caught are exported to foreign markets, 35 per cent are disposed of in Canada outside of this district, and the remainder used for home consumption. The fish-ways in this division are not as satisfactory as they should be. The inspector has suggested some changes, which he hopes to see carried out next summer. The lobster business was successfully prosecuted both as to the exportation of live fish and the canning industry. It seems to be the wish of all the fishermen throughout this district to raise the standard of legally caught lobsters from 9 to 10½ inches. Strongly recommends on behalf of the fishermen that this change should be made.

ANNAPOLIS COUNTY.

Overseer W. M. Bailey writes: In vessels, boats and men engaged in 1896, there is very little change from last year. Gill-nets, weirs and lobsters about the same. Salmon and herring show improvement. Cod an average yield. Hake, haddock and pollock an increase; other fish nominal. On the whole the fishery of his district has been fairly successful.

KING'S COUNTY.

Overseer James S. Miller, of Canning, reports that while salmon fishing was very good, the shad fishery was a comparative failure. Line fishing for cod, haddock, &c., has been very good all through the season. Herring was plentiful in some places and scarce in others, for some reason their distribution was very unequal. We have no lobster fishermen in this county; but vessels from down the bay come here to engage in that fishery to some extent. In the basin of Minas all kinds of fishing were poor, hardly any shad were caught.

All of which is respectfully submitted.

L. S. FORD,

Inspector of Fisheries.

NOVA SCOTIA—DISTRICT No. 1.

RETURN showing the Number and Value of Vessels and Boats, and all Fishing Materials, with the Number of Men employed in the Fishing Industry, as well as the Kinds and Quantities of Fish caught in the Province of Nova Scotia, for the Year 1936.

FISHING VESSELS AND BOATS.				FISHING MATERIAL.				KIND OF FISH.								Number.			
Vessels.		Boats.		Gill Nets.	Trawls.	Salmon, salted, brls.	Salmon, fresh in ice, lbs.	Salmon preserved in cans, lbs.	Herring, salted, brls.	Herring, fresh or frozen lbs.	Herring, smoked, lbs.	Mackerel, salted, brls.	Mackerel, fresh or preserved, in cans, lbs.	Lobsters preserved, in cans, lbs.	Lobsters alive or fresh, tons.	Number.			
No.	Tonnage.	No.	Value.														Fathoms.	Value.	No.	Value.
<i>Cape Breton County.</i>																			
1				70	1185	94	4600	1240	82	200	400	1236	320	6000	40	500	81504	1	
2				30	1105	46	2390	714	45	100	100	68	1200					2	
3				39	990	89	2335	800	27	112	1450	123	2000		4		36624	3	
4				31	378	56	1760	440	3	6	1240	41	6000	5000				4	
5				40	525	80	1000	500	200	600	750	275			5			5	
6				14	160	20	350	200	60	175	200	65			3			6	
7				55	850	110	3500	1200	250	750	100	400			15		50400	7	
8				28	300	30	800	375	60	200	2000	150			7			8	
9				18	275	32	1400	600	40	175	150	225			10			9	
10				29	1240	62	4250	2130			620	231			367		58416	10	
11				41	2950	89	8200	4100	6	60	40	11750	640		380			11	
12				10	500	25	1210	605			14	2370	960		20		26928	12	
13				40	2000	90	8000	4000			30	667			50		59510	13	
14				52	1040	90	12000	5800	6	60	22	10070			30			14	
15				12	900	33	1100	550							10		31624	15	
16				163	3528	181	5940	2450			40				640		108056	16	
17				34	386	69	590	280	14	48								17	
18				40	570	84	1000	550	36	144								18	
19				25	260	50	450	240	8	24								19	
Totals				12	199 3900 65	771	18242 1330	60885	26714	837 2654	106	31647	2816 3643	13900	5000	1581	500	448062	23

Note.—No. 1, add Smelt net, \$10. No. 16, add 1 trap-net, \$300, and 2 seines 250 fathoms, \$500.

Return showing the Number and Value of Vessels and Boats and all Fishing Materials, &c.—*Con.*

Number.	DISTRICTS.	KINDS OF FISH.													FISH PRODUCTS.					TOTAL VALUE.	Number.			
		Cod, dried, cwt.	Cod, tongues & sounds, lbs.	Hake, dried, cwt.	Haddock, cwt.	Pollack, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Bas, lbs.	Alwates, lbs.	Oysters, brls.	Clams, brls.	Eels, brls.	Shad, brls.	Squid, brls.	Flounders, lbs.	Tom Cod or Frost fish, lbs.	Course & mixed fish, brl			Fish Oils, galls.	Fish used as bait, brls.	Fish Guano, tons.	Seal skins, number.
1	From False Bay Beach to Long Beach	1260			180	50	400	31000	2000		22	22	27	25	25	12	2000			820	320	124		1
2	From Long Beach to Glace Bay and Bridgeport	112			10		600	4500	2000	110	18	18	4	20			2000			81	40	6	20	2
3	From Lingam to South Bar and Sydney River	398		7	92		600	5000	2500		20	15		25		30				170	100	60		3
4	Sydney to North-west Arm and Sydney Forks	10					2300		2100		50			135							384			4
5	From Grand Narrows Bridge to Christmas Isl'd.	1000	8		250		125		600		115			20						375	230			5
6	Boisdale to George's River	375			35		175		400		35			17						125	75			6
7	Little Bras d'Or and Bonharderie	2500	1025	300			200	10000	300		75			25		300				700	700	100		7
8	Sydney Mines, Big and Little Ponds	300	3		70			500			15			10		30				70	60			8
9	North Sydney to Ball's Creek	475	3		40			2500	750		15			15		35				125	70	700		9
10	Louisbourg and Kennington Cove	705			116		10	1050	300		5			80		102				475	115			10
11	Big and Little Lorraine	1270			400	18		1500	400		9									820	175			11
12	Baulné	310			96	4		500	150		3			1		20				130	50			12
13	Main de-Dieu	900			190			1000	300		4					80				450	150			13
14	Mira Bay and River	460			15	155	12	600	800		40	8		10	7	50				250	130			14
15	Scattarie Island	750			6	240	30	2000			10				4	20				600	35			15
16	Gabarus, Grand Mira and Big Lake	2110			190		200		500		7	45		74						3100	400			16
17	North side East Bay and Fork's Lake	55					180				1									800	20	15		17
18	Benacadie, Piper's Cove and Grand Narrows	360					50								4					130	70			18
19	South side East Bay	50					60		400					8						20	5			19
	Totals	13460	2453	2364	134	5390	60550	13500	110	459	5394	384	11	789	2000	1500	3	6491	3124	190	820			197214 63.

RETURN showing the Number and Value of Vessels and Boats engaged in the Fisheries, Fishing Material, &c.—Nova Scotia—*Con.*

FISHING VESSELS AND BOATS.				FISHING MATERIALS.				KINDS OF FISH.															
Number.	Vessels.			Boats.			Gill-Nets.		Smelt Nets.	Trawls.		Salmon, fresh in ice, lbs.	Salmon, preserved in cans, lbs.	Herring, salted, brls.	Herring, fresh or frozen, lbs.	Mackerel, salted, brls.	Mackerel, fresh or preserved (in cans) lbs.	Lobsters, preserved (in cans), lbs.	Lobsters, fresh or alive, tons.				
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Number.	Value.												
<i>Inverness County.</i>																							
1	Port Hood				70	1400	150	12000	3800		180	1100	200		300	10000	40	44376					
2	Little Mabou				24	240	40	1200	380		25	120		120	4000	6							
3	Seaside				12	180	24	2000	700		30	150		200	6000	8	17520						
4	Judique and Little Judique				55	640	115	5500	1800	10	15	260	300	1040	63000	18	27000						
5	Long Point				30	400	50	2500	700		30	150	5000	440	8000	25	20256						
6	Craigish				20	240	40	2000	600		20	100	6000	520	6000	10							
7	Low Point				25	300	50	3000	1000		60	300		700	7000	10							
8	Port Hastings	1	78	1600	8	30	600	45	1800	600	20	40	200	1060	3000	50							
9	Port Hawkesbury	2	100	4000	16	10	150	10	5000	1500	30	75	150	1300	1000	100							
10	West Bay to Malagawatch				112	1785	278	10600	4380														
11	Orangeable Boom and River Dennis				88	1315	200	5600	1830				1830		200								
12	Seal Cove, Estmere and River Inhabitants				20	290	46	1560	677						100								
13	Mabou Harb., Coal Mines and Ban Verrach.				21	420	42	637	280				600	480	70		300	25152					
14	Port Bain and Broad Cove				10	200	20	350	150						10		5	7776					
15	Whycocomagh				7	100	14	300	140		7	85	450		9								
16	Scottsville and East Lake Ainslie				4	32	8	180	40														
17	West side Margaree Har., Margaree R. and Forks				16	280	32	1340	687				41985	45		48	6100	9312					
18	Margaree Island				24	480	75	1120	480					140		195		5856					
19	Broad Cove Marsh and Whale Cove				16	320	46	900	452		3	22	1200	98		88							
20	Grand Etang				10	400	30	1000	500		4	18	250	230		200	24672						
21	Friar's Head				18	650	54	1800	790					250		100							
22	Delaney's Cove				4	120	12	450	220				250	29		31							
23	East side Margaree Harbour				20	1000	63	2000	600				500	400		20							
24	Eastern Harbour and Cheticamp	22	302	7500	99	125	2720	430	4760	1872			16	7000	1587	1047		35740	72				
25	Pleasant Bay and Cape Rouge				74	1121	216	625	175		20	200	4800	290		915		21960	67				
Totals		25	480	13100	123	845	15383	2090	68242	24353	60	130	501	2855	16	68535	480	9748	111000	2916	6400	239620	189

NOTE.—No. 1, add 1 trap net, \$700; No. 2, add 3 seines, 525 fathoms, \$600; No. 17, add 52 weirs, \$416.

RETURN showing the Number and Value of Vessels and Boats engaged in the Fisheries, Fishing Material, &c.—Nova Scotia—*Con.*

Number.	DISTRICTS.	KINDS OF FISH.										FISH PRODUCTS.					TOTAL VALUE.				
		Cod, dried, cwt.	Cod, tongues and sounds, brls.	Hake, dried, cwt.	Hake, sounds, lbs.	Haddock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Bas, lbs.	Alwives, brls.	Oysters, brls.	Clams, brls.	Bels, brls.	Shad, brls.	Squid, brls.		Dogfish, lbs.	Coarse & Mixed Fish, brls.	Fish used as Bait, brls.	Fish used as Manure, brls.	Fish Guano, tons.
Inverness County.																					
1	Port Hood	2200	3000	600	500	300	400	300	5	...	...	...	...	8	180	2500	...	1600	300	30	26,350 64
2	Little Mabou	400	100	20	30	100	100	100	300	...	5	...	...	...	15	500	...	60	50	...	2,678 00
3	Seaside	150	300	70	50	100	100	250	100	...	5	...	...	...	25	600	...	60	60	20	5,024 80
4	Judique and Little Judique	300	110	40	90	2500	...	...	500	...	6	...	...	60	55	1100	...	60	110	10	1,750 50
5	Long Point	250	20	50	1400	...	...	...	200	...	12	...	...	5	...	400	...	40	60	...	7,440 34
6	Creignish	200	...	60	...	...	...	...	...	...	30	...	...	...	...	300	...	40	50	...	4,439 00
7	Low Point	220	...	40	...	...	...	...	...	...	30	...	...	...	...	300	...	45	80	...	4,293 50
8	Port Hastings	230	230	40	...	...	...	...	3000	...	35	...	...	50	15	300	...	50	60	...	6,698 00
9	Port Hawkesbury	120	200	20	20	600	900	900	1000	...	20	...	...	8	25	200	...	100	40	...	3,614 50
10	West Bay to Malagawatch	250	15	55	...	...	...	...	6000	...	40	...	...	110	...	...	...	45	70	...	8,436 75
11	Orange-dale, Boom and River Dennis	235	...	...	...	...	2000	7000	1500	...	150	630	60	240	300	...	1600	50	...	...	10,110 00
12	Seal Cove, Estmere and Riv. Inhabitants	120	5	...	...	...	1200	2000	1500	...	50	140	20	30	100	...	...	10	50	...	2,734 00
13	Mabou Har., Coal Mines and Ben Virrach	235	62	55	...	...	40	170	3600	100	4	...	...	...	...	...	...	168	95	...	5,966 48
14	Port Bain and Broad Cove	50	4	12	...	...	200	...	5000	...	...	...	...	15	...	...	...	30	25	...	1,750 64
15	Whycocomagh	100	...	...	...	...	900	...	2000	...	...	...	...	...	...	...	...	45	13	...	935 25
16	Scottsville and East Lake Anslie	...	...	...	...	...	11200	...	10000	...	23	...	...	...	...	...	...	...	...	...	2,010 50
17	West Side Margaree Har., Margaree R. and Forks	865	12	100	113	1400	1320	1320	...	...	210	...	...	8	10	...	...	520	85	...	16,739 68
18	Margaree Island	116	100	...	20	...	...	...	...	...	...	...	...	...	...	...	...	236	179	...	5,166 74
19	Broad Cove Marsh to Whale Cove	205	...	12	12	...	182	...	...	...	...	...	...	...	...	...	...	113	48	...	2,821 90
20	Grand Etang	1050	40	...	70	200	1000	1000	...	...	...	...	...	5	50	...	...	450	100	...	12,304 08
21	Friar's Head	500	45	95	...	...	...	...	...	...	...	...	...	...	...	...	...	243	302	...	5,191 45
22	Delaney's Cove	150	13	22	...	...	100	...	...	...	50	...	...	...	...	...	...	73	89	...	1,440 95
23	East Side Margaree Harbour	1800	60	100	500	500	500	500	...	...	...	...	...	...	...	...	...	600	60	...	10,880 00
24	Eastern Harbour and Cheticamp	12930	30	405	610	930	6520	6520	...	...	...	...	130	150	2105	...	...	6315	2227	221	111,728 85
25	Pleasant Bay and Cape Rouge	835	147	100	149	...	2350	2350	...	...	...	...	...	...	...	...	...	465	550	50	31,370 15
Total		23511	50 4418	1625 2516	23900	13992	40600	400	670	786	229	732 15	3487	6500	415	12968	4753	60	271	301,966 70	

RETURN showing the Number and Value of Vessels and Boats, and all Fishing Materials, &c.—Nova Scotia—*Con.*

DISTRIBUTORS.	FISHING VESSELS AND BOATS.						FISHING MATERIALS.						KINDS OF FISH.											
	Vessels.			Boats.			Gill-Nets.	Smelt-Nets.	Weirs.	Trawls.	Salmon, salted, brls.	Salmon, fresh in ice, lbs.	Herring, salted, brls.	Mackereel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, alive or fresh tons.								
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Value.	Number.	Value.														
County of Richmond.																								
1	Arichat and Petit de Grât.	8	157	2430	28	170	1750	219	28560	14200	3	50	1	15	118	1025	250	2550	410	73248	5	1		
2	Cape Auguet, Madame Island.	4	111	1665	13	104	1040	120	17780	8000					75	475		1500	200	45736	2	3		
3	West Arichat														58	375		1830	15	32448	4	2		
4	Rocky Bay and Cape Le Rond.					42	504	64	9580	4700					11	110		320	70	28320	4	4		
5	D'Escousse and Lower D'Escousse.	23	895	16000	254	234	2540	148	8800	4400	4	75	4	65	20	210		300	400			5	6	
6	St. Peter's	4	95	1800	22	14	240	20	2750	750								65				6	7	
7	River Bourgeoise	17	520	7500	136	23	160	26	3000	1000								30	10	35904		7	8	
8	Grandique and Port St. Louis					25	510	34	5300	1725								115				8	9	
9	River Inhabitants and Basin.	9	304	3600	43	155	1550	210	46000	11500	40	600						3300	410			9	10	
10	Port Malcolin and Gut of Causo.	8	324	2990	62	79	892	100	7310	2173								700	118			10	11	
11	West Bay.					100	1000	200	4400	1800							8	250				11	12	
12	Fourchu to St. Esprit.					57	1940	155	7800	1520								260	430	104200		12	13	
13	L'Archeveque to Point Michaud					78	1370	176	15400	2900							1506	315	495	79880		13	14	
14	L'Ardoise, Lower L'Ardoise and Rockdale	1	11	200	4	310	8801	398	81250	11400							19	5000	850	1450	76944		14	15
15	Grande Grève, St. Peter's East and Indian Reserve.					51	1250	105	6400	1580								520	110	38000		15	16	
Totals.....		74	2417	36095	562	1521	24497	2074	258090	72050	47	725	5	80	282	2195	27	6750	12905	4118	514680		8	17

RETURN showing the Number and Value of Vessels and Boats, and all Fishing Materials, &c.—Nova Scotia—Con.

Number.	DISTRICTS.	KINDS OF FISH.												FISH PRO- DUCTS.		TOTAL VALUE.	Number.	
		Cod, dried, cwt.	Cod Tongues and Sounds, brls.	Haddock, cwt.	Pollock, cwt.	Haitbut, lbs.	Smelts, lbs.	Alwives, brls.	Clams, brls.	Eels, brls.	Squid, brls.	Flounders, lbs.	Tom Cod or Frost Fish, lbs.	Coarse and Mixed Fish, lbs.	Fish Oils, galls.			Fish used as Bait, brls.
1	County of Richmond.	1396	8	730	95	2070	..	12	25	10	70	26300	..	..	890	40	35,938	72
2	Arichat and Petit de Grat....	320	3	500	600	800	..	2	15	3	15	7000	..	..	600	35	19,372	54
3	Cape Auguet, Madame Island....	488	2	200	4	300	..	20	50	12	30	2000	..	..	488	40	15,040	42
4	West Arichat	100	..	60	8	600	..	5	8	3	30	14080	..	..	120	20	7,753	30
5	Rocky Bay and Cape Le Rond ..	4550	5	200	500	12000	1500	10	320	18	18	11800	..	..	1825	20	31,257	00
6	D'Escousse and Lower D'Escousse..	1800	..	120	..	..	..	..	..	8	..	..	..	..	320	27	7,962	25
7	St. Peter's	6000	..	400	..	..	..	..	..	..	..	..	..	..	4000	100	31,929	06
8	River Bougeoise	165	..	40	..	..	5300	23	..	10	..	..	..	..	75	15	1,659	25
9	Grandique and Port St. Louis ..	5550	..	3510	..	..	27000	650	..	25	..	..	..	..	170	55	52,238	00
10	River Inhabitants and Basin....	1220	..	..	..	..	..	211	..	..	..	..	..	..	254	21	10,028	60
11	Port Malcolm and Gut of Canso ..	550	..	..	..	..	..	..	12	25	..	..	..	..	170	18	3,652	50
12	West Bay	2700	..	70	..	3000	..	..	..	22	115	1500	3420	95	230	900	34,756	50
13	Fourchu to St. Esprit	325	..	45	10	3400	..	20	..	30	56	2050	1830	35	135	60	22,392	70
14	L'Archevêque to Point Michaud ..	3050	..	1475	300	2300	..	400	..	12	130	6500	16500	195	2250	390	57,397	41
15	L'Ardoise, Lower L'Ardoise and Rockdale..	460	..	110	16	..	..	35	..	52	23	900	1500	55	330	175	12,843	50
	St. Peter's East and Indian Reserve...																	
	Totals.....	28369	13	7460	1533	24470	33800	1400	418	230	487	72130	23250	380	12527	1246	343,721	75

RETURN showing the Number and Value of Vessels and Boats engaged in the Fisheries, Fishing Material, &c.—Nova Scotia—Con.

Number.	FISHING VESSELS AND BOATS.				FISHING MATERIAL.				KINDS OF FISH.							Number.				
	Vessels.		Boats.		Gill-Nets.		Trawls.	KINDS OF FISH.												
	Number.	Tonnage.	Value.	Men.	Number.	Value.		Fathoms.	Value.	Number.	Value.	Salmon, salted, brls.	Salmon, fresh, in ice, lbs.	Salmon, preserved in cans, lbs.	Herring, salted, brls.		Mackerel, salted, brls.	Lobsters, preserved (in cans), lbs.	Lobster, alive or fresh, tons.	Cod, dried, cwt.
<i>Victoria County.</i>																				
1	Meat Cove to Bay St. Lawrence Pond	68	1234	125	16222	740	15	1200	192	11	306	44160	380	1						
2	Cape North to White Point	106	2056	172	4516	1842	2	39		33	481	37148	1175	30	2					
3	New Haven and Neil's Harbour	110	3600	165	5140	2056	5	50		5	12	30720	3800	6	3					
4	Green Cove and North Ingomish	93	1808	138	3100	1100	22	220	39	96	5	35	13056	1900	4	4				
5	New Campbellton, Big Bras d'Or and Bird Island	50	540	46	2600	730	17	100	1	600	280	35	15196	170	10	5				
6	Englishtown, St. Ann's Bay and Black Head	1	15	200	3	90	720	70	5000	1300	33	198	42	500	640					
7	El Cove, Indian Brook and North River		50	508	95	4800	1800	20	114	9	800	100	60	13612	160	50	7			
8	Breton Cove, Little River and Black Rock		24	370	44	2300	890	17	100			100	60	13612	300	23	8			
9	French River, Wreck Cove and Pothend		42	680	53	4600	1500	30	180	30	60	100	58	15600	425	30	9			
10	South Bay, Ingomish and Middle Head	3	70	1200	18	1000	220	15900	4425	200	1370	74	1500	1440	700	80	34624			
11	Kemp Head, Boularderie and Baddeck		54	655	71	1464	379	41	145	81250	330	6						1		
12	North and South Side, Little Narrows		43	424	57	1350	324	35	121	2	750	455	3							
13	Washabuck and Iona		81	746	138	3067	650	69	231	1560	730	4								
Total		4	85	1400	21	911	15341	17736	491	2852	259	8220	1828	3984	1091	204116	2	16673	238	

NOTE.—In No. 6, add 2 trap nets, \$1,000, and 1 seine, \$60.

RETURN showing the Number and Value of Vessels and Boats engaged in the Fisheries, Fishing Material, &c.—Nova Scotia—*Con.*

Number.	DISTRICTS.	KINDS OF FISH.										FISH PRODUCTS.			TOTAL VALUE.	Number.		
		Haddock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Alwives, brls.	Oysters, brls.	Clams, brls.	Fels, brls.	Squid, brls.	Dogfish, lbs.	Tom cod or frost fish, lbs.	Coarse and mixed fish, brls.	Fish Oils, galls.			Fish used as Bait, brls.	Seal Skins, number.
<i>Victoria County.</i>																		
1	Meat Cove to Bay St. Lawrence Pond.	10									40000			50	284	678	127	14,398 30
2	Cape North to White Point	129		3300					47		57000			58	882	755	26	20,774 27
3	New Haven and Neil's Harbour	316									50000			75	2850	600	34	23,185 80
4	Green Cove and North Ingouish	180									36000			51	1425	340	45	12,651 24
5	New Campbellton, Big Bras d'Or and Bird Island	10		100						10	28			50	110	40		5,001 94
6	Englishtown, St. Ann's Bay and Black Head	10			10000					24	20	2000			130	40		4,936 50
7	Eel Cove, Indian Brook and North River	25	2100	2500	40000					73	60	400			170	60		6,792 00
8	Breton Cove, Little River and Black Rock	50	150						2		70			3400	190	100		15,413 93
9	French River, Wreck Cove and Parthead	325	1500	4000	3000			10	20	2500		100		3900	200	110	30	18,293 00
10	South Bay, Ingouish and Middle Head		1860		3000			10	20					3000	2200	1080		44,288 61
11	Kemp Head, Boulderierie and Baddeck		875		4852	18	235	8	59					48	95	30		10,550 00
12	North and South Side, Little Narrows				4852	20	420	12	28					30	153	30		7,801 55
13	Washabuck and Iona				2745									29	305	42		16,557 25
	Total	1040	6485	12300	63807	42	725	43	288	2758	183000	2500	10691	8994	3905	262		200,644 39

RECAPITULATION

Of the Yield and Value of the Fisheries for the Island of Cape Breton,
for the Year 1896.

Kinds of Fish.	Quantity.	Rate.		Value.	
		\$	cts.	\$	cts.
Salmon, pickled.....	Brls. 408	16	00	6,528	00
Salmon, fresh.....	Lbs. 115,152	20		23,030	40
Salmon, preserved.....	Cans. 5,124	15		768	60
Herring, pickled.....	Brls. 30,280	3	75	113,550	00
Herring, fresh or frozen.....	Lbs. 126,900	1½		1,586	25
Herring, smoked.....	" 5,000	2		100	00
Mackerel, pickled.....	Brls. 9,706	14	00	135,884	00
Mackerel preserved.....	Cans. 6,900	12		828	00
Lobsters, preserved.....	" 1,406,478	14		196,906	92
Lobsters, fresh.....	Tons. 152½	75	00	11,418	75
Cod, dried.....	Cwt. 82,313	4	00	329,252	00
Cod, tongues and sound.....	Brls. 87	10	00	870	00
Hake, dried.....	Cwt. 4,709	2	00	9,418	00
Hake, sounds.....	Lbs. 1,625	50		812	50
Haddock, dried.....	Cwt. 13,380	2	25	30,105	00
Pollock, dried.....	" 1,667	2	00	3,334	00
Trout.....	Lbs. 35,775	10		3,577	50
Halibut, fresh.....	" 111,312	10		11,131	20
Smelt.....	151,707	5		7,585	35
Bass.....	" 510	10		51	00
Alewives.....	Brls. 2,541	3	50	8,893	50
Oysters.....	" 1,564	4	00	6,256	00
Clams.....	" 784	6	00	4,704	00
Eels.....	" 1,634	10	00	16,340	00
Shad.....	" 26	10	00	260	00
Squid.....	" 7,521	4	00	30,084	00
Flounders.....	Lbs. 71,130	5		3,706	50
Tom cod or frost fish.....	" 27,250	5		1,362	50
Coarse and mixed fish.....	Brls. 11,489	3	00	34,467	00
Fish oil.....	Gals. 40,980	40		16,392	00
Fish used as bait.....	Brls. 13,028	1	50	19,542	00
Fish used as manure.....	" 60	50		30	00
Fish guano.....	Tons. 461	25	00	11,525	00
Seal skins.....	No. 1,082	1	25	1,352	50
Dog fish.....	Lbs. 189,500	1		1,895	00
Total for 1896.....				1,043,547	47
Total for 1895.....				1,067,776	11
Decrease.....				24,228	64

RECAPITULATION

SHOWING the Number and Value of Fishing Vessels, Boats, Nets, etc., in the District
No. 1 of Nova Scotia for the year 1896.

	Value.	Total.
	\$ cts.	\$ cts.
115 vessels, 3181 tons.....	54,495 00	
4048 boats.....	73,463 00	
442,956 fathoms gill nets.....	140,913 00	
6 seines (895 fathoms).....	1,160 00	
4 trap-nets.....	2,000 00	
2111 trawls.....	10,556 00	
57 weirs.....	496 00	
108 smelt-nets.....	865 00	
		283,948 00
64 lobster canneries (1570 hands).....	42,960 00	
141,670 lobster traps.....	76,085 00	
		119,045 00
32 freezers and ice-houses.....	4,622 00	
1183 smoke and fish-houses.....	48,290 00	
247 piers and wharfs.....	52,210 00	
56 tugs, steamers and smacks.....	4,472 00	
		109,594 00
Total value.....		512,587 00

NOVA SCOTIA—

RETURN showing the Number, Tonnage and Value of Vessels and Boats, and the the Number of Men employed in the Province of

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING MATERIALS.								
		Vessels.				Boats.		Gill-Nets.		Smelt-Nets.		Weirs.		Trawls.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
	<i>Antigonish County.</i>			\$				\$			\$		\$			\$
1	Harbour au Bouche.....	1	17	400	3	30	298	39	12000	817	...	...	...	...	29	255
2	Cape Jack, Linwood & Tracadie...	...	...	...	...	30	372	40	10300	871	...	...	...	...	10	92
3	Bayfield, Monk's Head & South Side.....	...	...	...	...	32	450	34	15930	2770	...	...	...	...	...	...
4	North Side Harbour, Morristown and Lakevale.....	1	38	1200	8	31	562	42	10400	1040	...	...	...	...	25	218
5	Cape George, Georgeville and Malignant Cove.....	...	...	...	...	32	485	46	11000	1227	...	...	...	...	31	288
6	Arisaig, Moidard and Knoydart..	...	...	...	...	26	472	39	6820	817	...	...	...	...	12	98
	Totals.....	2	55	1600	11	181	2639	240	66450	7542	...	...	...	...	107	951
	Values.....	\$	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	<i>Colchester County.</i>															
1	Sterling.....	...	...	...	...	8	160	18	530	150	9	225	...	...	...	...
2	Stewiacke.....	...	...	...	...	53	285	92	630	465	...	...	...	...	...	...
3	Five Islands.....	...	...	...	...	5	145	8	...	...	...	...	2	300	...	...
4	Economy.....	...	...	...	...	6	190	12	2015	265	...	...	7	2050	...	...
5	Little Bass River to Highland Village.....	...	...	...	...	16	628	32	5400	655	...	...	4	1000	...	...
6	Great Village to Queen's Village.	...	...	...	...	24	684	48	7565	867	...	...	...	...	...	...
	Totals.....	...	...	...	...	112	2092	210	16140	2402	9	225	13	3350	...	...
	Values.....	\$	...	...	...	...	...	...	...	...	...	...	...	...	...	...

NOTE.—In No 1 add 9 smelt nets \$225.

District No. 2.

Quantity and Value of all Fishing Materials, the Kinds and Quantities of Fish, and Nova Scotia (District No. 2) for the Year 1896.

KINDS OF FISH.																			TOTAL VALUE
Salmon, fresh in ice, lbs.	Herring, salted, brls.	Herring, fresh or frozen, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Haddock, cwt.	Trout, lbs.	Smelts, lbs.	Bass, lbs.	Alewives, brls.	Oysters, brls.	Eels, brls.	Shad, brls.	Coarse and Mixed Fish, brls.	Fish Oils, galls.	Fish used as Bait, brls.	
.....	516	.....	52	52080	92	52	198	16	200	1500	.....	61	.....	10	.....	15	79	118	11,710
1200	414	.....	21	.....	55	27	86	7	400	3000	.....	33	90	80	.....	80	101	110	4,587
19600	281	.....	174	21264	22	.....	.....	.....	600	10000	.....	33	.....	100	.....	.....	.....	124	12,574
5550	336	.....	31	32832	284	380	1341	63	200	800	.....	40	.....	5	.....	.....	740	179	11,605
400	227	.....	37	33912	215	697	2088	57	.....	.....	.....	37	.....	.....	.....	.....	639	181	10,213
6400	210	.....	56	13672	41	618	1784	17	.....	.....	.....	.....	.....	.....	.....	.....	546	112	12,973
33150	1984	.....	371	183760	709	1744	5497	160	1400	15300	.....	204	90	195	.....	95	2105	824	.....
6630	8928	.....	5194	25726	3190	4435	2748	560	140	765	.....	816	360	1950	.....	142	842	1236	63,662
.....	.....	.....	.....	17048	.....	.....	.....	.....	300	13400	.....	.....	54	2	12	.....	.....	40	3,463
9100	.....	.....	.....	.....	.....	.....	.....	.....	3050	.....	1200	134	.....	.....	48	.....	.....	.....	3,261
500	.....	.....	.....	.....	102	.....	.....	21	200	.....	.....	.....	.....	.....	3	.....	38	.....	698
2840	23000	.....	.....	.....	13	.....	.....	.....	300	.....	.....	.....	.....	.....	53	.....	.....	.....	1,646
16788	.....	.....	.....	.....	.....	.....	.....	.....	400	.....	.....	.....	.....	.....	168	.....	.....	.....	5,077
24085	.....	.....	.....	.....	.....	.....	.....	.....	200	.....	.....	.....	.....	.....	119	.....	.....	.....	6,027
53313	23000	.....	.....	17048	115	.....	.....	21	4450	13400	1200	134	54	2	403	.....	38	40	.....
10662	460	.....	.....	2387	517	.....	.....	74	445	670	120	536	216	20	4030	.....	15	20	20,172

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, Fishing Material, &c.—
Nova Scotia—Continued.

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING MATERIALS.						KINDS OF FISH.												
		Vessels.			Boats.			Gill Nets.		Trap Nets.		Seines.		Trawls.		Salmon, fresh, in ice, lbs.	Salmon, preserved, in cans, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh or frozen, lbs.	Mackerel, salted, brls.	Mackerel, fresh or preserved, in cans, lbs.				
		Number.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Number.	Value.	Number.	Fathoms.	Number.	Value.											
																							%	%	%	%
		Cangborough County.																								
1	Kenm Secum				70	1200	92	3300	1200					2	140	90	12	60	750	250	120			20		1
2	Marie Joseph.....				52	1400	84	2600	900								10	50	250		250			25		2
3	Liscombe, Spanish Bay and Gegoggin				120	2800	150	6800	2400								20	100	1200		530			29		3
4	St. Mary's River and Bay				42	900	60	2500	860					2	160	175	10	50	6460	200	650			30		4
5	Wine Harbour				30	600	48	2200	750					2	150	100	9	45	1500		400			25		5
6	Indian Harbour and Lake				60	1200	75	4000	1800								15	75	950		600			32		6
7	Holland Harbour and Indian River				20	760	38	3500	1500								9	50	1200		750			15		7
8	Port Beckerton				55	1500	75	4500	2000								12	60	400		800			30		8
9	Fisherman's Harbour				38	900	50	3900	2500								9	50			700			40		9
10	Country Harbour and Isaac's Harbour				32	700	50	2400	1000					6	1450		7	40	1500		250	2000		25	10	10
11	Isaac's Harbour to Whitehead Harbour	10	183	6800	58	748	20944	780117840	35352					2	210	800	170	960	2300	500	3919	36400	1600	31800	11	
12	Whitehead to Canso, including Little	5	74	1380	29	210	10980	318	31800	9540	12	4900		6	900	975	175	875	10500	2300		860	48000	225	363875	12
13	Canso to Salmon River	2	29	890	11	289	4140	290	34290	13550	39	4650		7	8	750	350	1750	8975			980	12900	1490	452952	13
14	Salmon River to Antigonish County Line, including Cook's Cove, Gaysborough, North Shore and Canso	10	315	6500	61	500	10730	510	128960	32240				6	680	650	200	1000	15000		3000	120000		2717	467250	14
	Totals	27	601	15480	159	2266	58754	2620	368500	105592	57	11000		29	3270	8740	1008	5165	50885	3000	1300	13499	218400	6393	135877	
	Values																		10197	450	260	60745	2184	88242	65794	

Return showing the Quantities and Value of Fish, &c. Nova Scotia—Continued.

Number.	Districts.	Kinds of Fish										Fish Products					Total Value.
		Lobsters, preserved, in cans, lbs.	Lobsters, alive or fresh, tons	Cod, dried, wt.	Cod, tongue, and sounds, lbs.	Haddock, lbs.	Salmon, lbs.	Trout, lbs.	Halibut, lbs.	Whitefish, lbs.	Green and black, lbs.	Turned out or roasted, lbs.	Fish used as Bait.	Fish used as Manure.			
Guysborough County																	
1	Point Stueam,	267.28	..	325	.....	1200	900	400	.....	12	20	35	75	600	160	8.387
2	Marie Joseph,	6.605	..	6.70	.....	200	2600	600	.....	20	15	10	80	300	655	16.130
3	Liscombe, Spanish Bay and Cape Breton,	1.10.00	..	3.50	.....	2500	1800	1200	.....	220	90	25	120	1000	710	21.302
4	St. Mary's River and Bay,	405.000	..	320	.....	3000	9000	600	200	200	30	10	60	900	461	14.038
5	Wine Harbour,	3.50.00	..	215	.....	1000	1500	400	400	15	30	10	40	100	263	4.495
6	Indian Harbour and Lake,	35.000	..	3.70	.....	100	900	300	.....	80	25	15	40	400	203	10.883
7	Holland Harbour and Indian River,	581.067	..	200	.....	2000	1000	400	.....	10	15	20	20	360	959	8.986
8	Port Beekerton,	21.648	..	7.75	.....	1000	1000	300	.....	15	20	25	25	100	463	15.809
9	Fisherman's Harbour,	363.680	..	8.90	.....	3000	400	400	.....	10	30	30	60	500	503	10.608
10	Country Harbour and Isaac's Harbour,	363.880	..	2.40	.....	1000	2000	1200	.....	10	10	20	25	400	303	9.604
11	Isaac's Harbour to Whitehead,	382.176	..	6.75	.....	1510	10000	1000	.....	110	350	150	150	340	4425	2150
12	Whitehead to Canso including Fiddle,	530.070	..	1992	.....	1800	500	20000	.....	50	4	16	1850	210	20300	191.914
13	Canso to Salmon River,	97.92	..	2750	.....	300	50	337.8	.....	600	110	900	600	720	14876	493.294
14	Salmon River to Antigonish, County Line, including Cook's Cove, Guysborough, North Shore and Canso, ..	836.416	..	242.65	.....	15	12.3	1550	19628	1491	319	816	674.3	6340	37231	117.812
Totals,		8117.608	1950	6091.92	150	3197	775	63638	57.35	39.16	17.25	1388	100	8288	2233	28552	646.146
Values,		8117.608	1950	6091.92	150	3197	775	63638	57.35	39.16	17.25	1388	100	8288	2233	28552	646.146

27 Tangier	1	39	1550	7	45	980	37	9000	600	1	400	.....	.....	.....	45	135 27
28 Pope's Harbour and Gerrard's Island	5	157	2700	32	31	497	37	2162	523	.....	.....	.....	.....	.....	30	90 28
29 Spry Bay, Taylor's Head and Mushaboon	.....	.....	.....	.....	57	949	73	9860	2116	.....	.....	.....	.....	.....	.....	29
30 Sober Island and Sheet Harbour	.....	.....	.....	.....	65	1247	65	3880	740	.....	.....	.....	.....	.....	.....	30
31 Beaver Harbour and Salmon River	.....	.....	.....	.....	40	750	26	360	72	.....	.....	.....	.....	.....	.....	31
32 Quoddy and Harrigan Cove	1	10	125	2	16	240	10	200	40	.....	.....	.....	.....	.....	.....	32
33 Moser River and Smith's Cove	.....	.....	.....	.....	12	200	22	160	45	.....	.....	.....	.....	.....	.....	33
34 Mitchell's Bay to Ecum Secum	.....	.....	.....	.....	23	334	34	1040	174	.....	.....	.....	.....	.....	.....	34
Totals	59	1531	38315	367	2575	39303	2607	288612	38058	10	1150	411	42875	62355	1512	3765

RETURN showing the Quantities and Value of all,

Number.	DISTRICTS.	SALMON.		HERRING.			MACKEREL.		LOBSTERS.		COD.		
		Fresh in ice, lbs.	Smoked, lbs.	Salted, brls.	Fresh or frozen, lbs.	Smoked, lbs.	Salted, brls.	Fresh or preserved, in cans, lbs.	Preserved, in cans, lbs.	Alive or fresh, tons.	Dried, cwt.		
Halifax County.													
1	North Shore.....	140		50			2			1	10		
2	East St. Margaret's.....	300		300			5			$\frac{1}{2}$	150		
3	Indian Harbour.....	3000		2000	1000		75	200		8	500		
4	Peggy's Cove.....	2000		300	100		2			4	200		
5	Dover.....	3000		1000	4000		200	100		8	300		
6	Prospect.....	5000		800	3000	1500	25	350	18112	20	450		
7	Terrence Bay.....	200		900	2500		700	1000	8579	30	1200		
8	Pennant.....	120		150	800		250			12	1000		
9	Sambro.....	250		25	500		100	240	52500	8	1250		
10	Ketch Harbour.....	400		250	400		45	150		5	200		
11	Portuguese Cove.....	250		100	100		25	150		$2\frac{1}{2}$	40		
12	Herring Cove.....	500		20	100		10			1	500		
13	Ferguson's Cove.....	50		10	500		1			$\frac{1}{2}$	12		
14	Bedford.....	400						200			2		
15	Halifax.....			15			5	250			600		
16	Eastern Passage and Devil's Island.....	880		59			7				619		
17	Lawrencetown and Cow Bay.....	338		68			6				48		
18	Seaforth and Three Fathom Harbour.....			93			7				159		
19	West Chezetcook.....			380			19				4000		
20	East Chezetcook.....			160			2				635		
21	Petpiswick Harbour.....			64			2		42000	125	337		
22	Musquodoboit Harbour.....	1700	260	140			8				650		
23	Jeddore.....	300	275	350			22		77336		1020		
24	Clam Harbour and Owl's Head.....	400	400	679			68				500		
25	Ship Harbour.....	260		957			69		9408		519		
26	Pleasant Harbour.....			186			3		38544		200		
27	Tangier.....	440		559			65				352		
28	Pope's Harbour and Gerrard's Island.....			450			8		34560	4	267		
29	Spry Bay, Taylor's Head and Mushaboon.....			553			151		87792	12	944		
30	Sober Island and Sheet Harbour.....	900	1400	199					71568		351		
31	Beaver Harbour and Salmon River.....			6					104688	20	62		
32	Quoddy and Harrigan Cove.....	200		5					78816		60		
33	Moser River and Smith's Cove.....										45		
34	Mitchell's Bay to Ecum Secum.....			14			3		128064		192		
Totals.....		22288	2335	10842	13000	1500	1885	2640	751967	261 $\frac{1}{2}$	17374		
Values.....\$		4457	467	48798	130	30	26390	132	105275	19613	78184		

Kinds of Fish, &c.—Nova Scotia—Continued.

HAKE.		OTHER KINDS OF FISH.												FISH PRODUCTS.				VALUE.		
Dried, cwt.	Sounds, lbs.	Haddock, cwt.	Pollock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Alewives, brls.	Oysters, brls.	Clams, brls.	Eels, brls.	Squid, brls.	Tom cod or frost fish, lbs.	Coarse and mixed fish, brls.	Fish oils, galls.	Fish used as bait, brls.	Fish used as manure, brls.	Seal skins, No.		Number.	
		10	10	400			12			2				5	10	4			854	1
		10	25	200		100	3		2		1			2	12	4			2,380	2
400	150	500	10	100	100	50	20		6	3	2	8		10	200	44			16,737	3
50	12	25	20	150	150	50	15		2	1	4			5	120	26			3,475	4
150	250	50	50	200	600	100	25		2	2	8			8	200	42			11,101	5
50	40	35	40	60		50	20		10	2	8			20	170	80	50		11,910	6
200	150	75	250	50	600	100	75		40	3	40			40	500	125	25		25,580	7
150	200	90	70	400	500	75	50		20	3	25			20	400	100			11,476	8
25	50	40	1100		1000	150	12		1	1	5			5	750	40	130		18,757	9
40	60	50	200		250		18				8			8	60	28			4,133	10
		10					2				3			3	15				1,292	11
150	250	1500			12000									2	250	140			9,919	12
10	15	5	12		300									2	15	10			299	13
					300					2									149	14
140	180	200	5	1000											800	40			4,481	15
		258	150		5770		17		22	5					400	42			5,676	16
		9	21	200	190	6600	36		12	3	2				20	19			1,429	17
			11	18	150	192	23000	26	26	4					69	28			2,895	18
		306	78		1439	6300	12		252	5					2096	150			24,626	19
		96	44	200	195	1700	27		47	7					406	40			4,906	20
		83	205	200	500		260		45	5					209	24	125		19,548	21
		62	128	700	1050	6400	6	2	30	13					460	31			5,694	22
8	23	80	198	100	2290	2000	11		47	15	5				595	60	200		19,532	23
3		45	20	650	877		3		13	5	4				310	47			7,159	24
4	40	20	28	220	1000	600	468		15	5	4				298	33	300		11,659	25
		22	14		270		3		7	4	2				93	18	100		7,587	26
		33	82	390	1150	1300	9		16	6	5	400			268	26			6,032	27
		4	16		612		1				4				406	8	360	3	8,972	28
300	500	20	9		1000				2	7	4				760	50	1000		24,188	29
		10	9	1000	170				2	5	2				100	8	750		13,630	30
		2								2					42	5	1100	18	17,082	31
		10	5	500					4		3				60	5	800		11,924	32
		6		500											30				313	33
		18			400				5	5					90	4	1200		19,728	34
1680	1920	3698	2817	7670	32605	48575	1130	2	629	120	146	400	130	10154	1281	6140	21	.....	.....
4200	960	12944	7042	767	3260	2428	4520	8	4403	1200	584	20	195	4061	1922	3070	21	335073	.....

RETURN showing the Number Tonnage and Value of Vessels

[illegible]

and Boats, and all Fishing Materials, &c.—Nova Scotia—Continued.

KINDS OF FISH.														FISH PRODUCTS.		VALUE.	Number.
Herring, fresh or frozen, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Hake, dried, cwt.	Haddock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Bass, lbs.	Alewives, brls.	Oysters, brls.	Fels, brls.	Shad, brls.	Fish used as bait, brls.	Fish used as manure, brls.		
									320	62			3			\$	
										256			38			1,390	1
2000			58		5	10000	700		900	86			50			1,565	2
													221			538	3
																4,886	4
2000			58		5	10000	700		1220	404			312				
20			261		18	1000	70		122	1616			3120			8,379	
	5 252588	20				300		3300			20	8		500	600	37,022	1
	20 176584													350	400	26,042	2
						500		5000		150	280	20				2,220	3
42800	5 17184	129				200		4900				12		20	45	5,612	4
	22540													100	50	4,730	5
								2200				35				960	6
	3 33477	77	112			200		2000						120	80	6,696	7
						150										595	8
42800	33 502373	226	112			1350		17400		150	300	75		1090	1175		
428	462 70332	1017	280			135		870		600	1200	750		1635	588	83,877	

COMPARATIVE STATEMENT of the Value of Fisheries in each County of District No. 2,
Nova Scotia, for the Years 1895 and 1896.

County.	Value in 1895.	Value in 1896.	Increase.	Decrease.
	\$	\$	\$	\$
Antigonish.....	60,182	63,662	3,480	.....
Colchester.....	26,798	20,172	.....	6,626
Cumberland.....	83,695	88,184	4,489	.....
Guysborough.....	711,499	646,116	.....	65,383
Halifax.....	429,671	335,073	.....	94,598
Hants.....	13,702	8,379	.....	5,323
Pictou.....	104,235	83,877	.....	20,358
Total.....	1,429,782	1,245,463	7,969	192,288
	1,245,463			7,969
Decrease.....	184,319			184,319

RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 2, Nova Scotia, with a
Comparative Statement of the Increase or Decrease for the Years 1895 and 1896.

Articles.	Quantity.	Rate.	Totals.	Increase.	Decrease.
		\$ cts.	\$		
Salmon, fresh.....	Lbs.	210,401	20	42,080	24,760
do canned.....	"	3,000	15	450	1,000
do smoked.....	"	3,635	20	727	1,600
Herring, salted.....	Brls.	26,628	4 50	119,826	39,841
do fresh.....	Lbs.	278,000	01	2,780	499,660
do smoked.....	"	25,600	02	512	15,467
Mackerel, salted.....	Brls.	8,594	14 00	120,316	2,627
do fresh.....	Lbs.	1,318,917	05	65,946	743,567
Lobsters, canned.....	"	2,784,238	14	389,792	496,660
do fresh.....	Tons.	290½	75 00	21,788	21½
Cod, dried.....	Cwt.	43,057	4 50	193,756	159
do tongues and sounds.....	Lbs.	15	10 00	150	25
Hake, dried.....	Cwt.	4,856	2 50	12,139	2,554
do sounds.....	Lbs.	8,967	50	4,483	1,460
Haddock.....	Cwt.	23,607	3 50	82,626	10,334
Pollock.....	"	4,343	2 50	10,857	1,038
Trout.....	Lbs.	52,730	10	5,273	10,792
Halibut.....	"	210,955	10	21,095	96,861
Smelts.....	"	198,935	05	9,946	17,870
Bass.....	"	3,420	10	342	270
Alewives.....	Brls.	4,799	4 00	19,196	349
Oysters.....	"	896	4 00	3,584	247
Clams.....	"	948	7 00	6,636	204
Eels.....	"	1,218	10 00	12,180	19
Shad.....	"	1,090	10 00	10,900	118
Squid.....	"	6,721	4 00	26,884	469
Tom cod.....	Lbs.	6,740	05	337	11,416
Coarse fish.....	Brls.	320	1 50	480	486
Fish oils.....	Galls.	49,573	40	19,828	18,703
do used as bait.....	Brls.	22,700	1 50	34,050	1,193
do products used as manure.....	"	12,965	50	6,483	5,213
Seal skins.....	No.	21	1 00	21	8
Total for 1896.....			1,245,463		

RECAPITULATION

SHOWING the number and Value of Fishing Vessels, Boats, etc., in the District No. 2,
Province of **Nova Scotia**, for the Year 1896.

	Value.	Total.
	\$	\$
92 vessels, 2279 tons.	57,395	
5635 boats	114,409	
754,208 fathoms gill-nets	160,862	
67 trap-nets.	12,150	
448 seines, 46,405 fathoms.	66,145	
61 smelt nets.	1,192	
29 weirs.	4,260	
2651 trawls	9,983	426,396
254,790 lobster traps	138,000	
108 canneries (1,792 hands).	124,425	262,425
37 freezers and ice houses.	19,355	
1629 smoke and fish houses.	69,328	
988 piers and wharfs.	44,864	
41 steamers and smacks	26,670	
3753 hand lines.	1,981	162,198
Total value.		851,019

NOVA SCOTIA—District No. 3.

RETURN showing the Number, Tonnage and Value of Vessels and Boats, and the Quantity and Value of all Fishing Materials and other Fixtures employed in the Fishing Industry in the County of Annapolis, Province of Nova Scotia, for the Year 1896.

Number.	DISTRICTS.				FISHING VESSELS AND BOATS.				FISHING MATERIALS.				KINDS OF FISH.										Number.
	Vessels.		Boats.						Gill-nets.		Weirs.												
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Number.	Value.	Salmon, fresh in ice, lbs.	Herring, salted, brls.	Herring, smoked, lbs.	Mackerel, salted, brls.	Mackerel, fresh or pre- served, in cans.	LoBSTERS, alive or fresh, tons.	Cod, dried, cwt.	Cod, tongues & sounds, brls.	Hake, dried, cwt.	Hake, sounds, lbs.		
<i>County of Annapolis.</i>																							
1		2	25	750	8	12	240	20	1200	600	2	400	6500	700			5000	4	520	3	112	75	1
2						19	380	30	2000	1000	2	700	7000	600			3500	5	250	2	200	100	2
3						22	440	44	3200	1600				700				6	520	5	600	300	3
4		1	46	1380	9	20	400	29	1600	800				750				7	650	4	450	225	4
5						23	460	38	2000	1000				620				9	625	4	1200	600	5
6						34	680	55	3000	1500				510				8	370	3	310	150	6
7		2	104	3120	20	28	560	40	2800	1400				470				12	320	2	790	370	7
8		6	276	8280	64	30	600	50	3000	1500				60				8	3250	9	3500	1500	8
9						10	200	20	1000	500	2	400						1	360	1	650	300	10
10		2	26	780	10	25	500	32	600	300	6	1200	6000	25	7000	10	6500						
11									3000	1500	5	300											
12											1	50	550										
13													500										
14																							
		15	477	14310	111	223	4460	359	23400	11700	18	3050	20550	4435	7000	10	15000	60	6865	33	8112	3720	
													4110	19458	140	140	1800	4500	30893	330	20280	1860	

Return showing the Quantity and Value of Fish, &c., Nova Scotia.—Continued.

Number.	DISTRICTS.	KINDS OF FISH.														FISH PRODUCTS.				TOTAL VALUE.	—Number.
		Haddock, cwt.	Pollock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Bass, lbs.	Alewives, brls.	Clams, brls.	Eels, brls.	Shad, brls.	Squid, brls.	Sardines, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Coarse and mixed fish, brls.	Fish oils, galls.	Fish used as bait, brls.	Fish used as manure, brls.			Fish guano, tons.
County of Annapolis.																					
1	Margaretville.....	112	105	.....	1500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	150	280	.....	10
2	Port George.....	200	100	.....	1000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	190	300	60	10
3	Port Lorne.....	700	1500	.....	2500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	230	430	65	20
4	Hampton.....	600	112	.....	10000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	400	420	80	12
5	Pinny and Young's Cove.....	1200	210	.....	2200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	400	400	75	12
6	Parker's Cove.....	1600	300	.....	2000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	290	340	.....	30
7	Hillsboro' and Delap's Cove.....	1400	500	.....	10000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	380	410	.....	12
8	Victoria Beach.....	7250	2500	.....	35300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1000	1220	20	40
9	Thorne's Cove to Ferry.....	90	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	30	.....
10	Clementsport to Bear River.....	1000	110	.....	2500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	230	260	100	20
11	Annapolis East to County Line.....	.....	.....	1000	.....	2000	2000	70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
12	Lequille River.....	.....	.....	600	.....	.....	200	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	Round Hill River.....	.....	.....	800	.....	.....	200	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
14	Island Lakes and Streams.....	.....	.....	9700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....		14152	5447	12100	67000	2000	2400	176	700	5	220	5250	200	2000	2000	3000	3270	4085	430	178	
Values.....		\$ 49532	13617	1210	6700	100	240	704	4900	50	2200	21000	800	100	100	6000	1308	6128	215	1424	
																				200,338 00	

NOTE.—Annapolis Royal has one fish drying establishment. Actual weight of fish dried 10,000 quintals. Employ 10 men. Weekly wages, \$65. Plant worth, \$7,000.

RETURN showing the Kinds and Value of Fish, &c.—Nova Scotia—Continued.

Number.	DISTRICTS.	KINDS OF FISH.													FISH PRODUCTS.			TOTAL VALUE.	Number.	
		Lobsters, preserved in cans, lbs.	Lobsters, alive or fresh, tons.	Cod, dried, cwt.	Cod, tongues & sounds, brls.	Hake, dried, cwt.	Hake, sounds, lbs.	Haddock, cwt.	Pollock, cwt.	Halibut, lbs.	Clams, brls.	Shad, brls.	Flounders, lbs.	Tom Cod or Frost Fish, lbs.	Coarse and Mixed Fish, brls.	Fish Oils, galls.	Fish used as Bait, brls.			Fish used as Manure, brls.
<i>Digby County.</i>																				
1	Digby	9000	10	3000	8	10000	1100	8000	200	21000	80	750	2600	50	3000	950	220	92,917	50	
2	Bayview		1	62	2	250	90	60	30	950	12	300	900	12	210	50	30	2,417	00	
3	Broad Cove		1	28	3	250	90	111	40	480				14	350	50	35	1,688	00	
4	Rossway			105	3	400	180	140	16	400				20	590	95	36	2,841	20	
5	Waterford			22	2½	125	100	39	9	220				5	80	16	8	866	00	
6	Centreville	8000	4	250	4	2000	260	70	38	650				19	1850	300	80	9,160	50	
7	Sandy Cove		1	60	1½	250	110	49	50	800				4	150	28	9	1,446	00	
8	Mink Cove		1	95	1	600	300	125	25	800				9	600	75	41	3,133	50	
9	Little River		1	240	1	1600	420	400	50	1100				18	450	155	24	14,670	50	
10	White Cove			80		400	150	30	20	500				10	400	56	20	2,254	00	
11	Long Beach and Whale Cove			270	4	1000	260	170	22	750				5	500	120	10	5,005	00	
12	East Ferry			120	1	650	310	76	24	1000				5	250	65	4	3,055	50	
13	St. Mary's Bay					200	120	20	50	900		319		10	180	29		4,550	00	
14	Weymouth					400	200	140	39		250			6		6		1,771	00	
15	White's Cove			46		100	110	76	25	900				11		24		2,022	50	
16	Church Point			115	1	100	110	120	400	1000		7		4		10		1,274	00	
17	Meteghan	15000	2	126	1	20	115	120	400	1000				23		65		5,821	00	
18	Cheticamp			126	1	20		36	110	750				6		29		1,106	50	
19	St. Mary's			320	2	150	100	100	50	600				5		60		2,151	00	
20	Smith's Cove			35		8000	600	900	230	200	110					280		3,677	50	
21	Westport		3	10200	14	5000	480	9000	4000	35000				50		3800		125,765	00	
22	Freepoint		3	7000	10	5000	480	7000	12000	18000				20		11000		109,055	00	
23	Tiverton	12000	1	3000	8	3500	250	3000	600	7500				19		1800		41,298	00	
Totals		44000	23½	25514	67	35015	5353	28852	17998	93500	452	326	1050	3500	325	44610	10533	517	.....
Values		6160	1763	114813	670	87538	2677	100982	44995	9350	3164	3260	53	175	650	17844	15860	259	437,946	20

NOTE.—No. 14, add 1 trap net, \$1,500. There is \$24,000 worth of Finnan Haddies added in each column.

the Quantity and Value of all Fishing Material, &c.—Nova Scotia—Continued.

KINDS OF FISH.												FISH PRODUCTS.			TOTAL VALUE.	Number.	
Salmon, fresh, in ice, lbs.	Herring, salted, brls.	Herring, smoked, lbs.	Mackerel, salted, brls.	Lobsters, alive or fresh, tons.	Cod, dried, cwt.	Haddock, cwt.	Pollock, cwt.	Trout, lbs.	Bass, lbs.	Alewives, brls.	Shad, brls.	Fish oils, galls.	Fish used as bait, brls.	Fish used as manure, brls.			
																\$ cts.	
											165				50	1,675 00	1
											10				25	127 50	2
300	23	60000	1		2		5				1		20		50	1,464 00	3
200	4	5000			2		2						5		20	189 50	4
20000	400				240	75	50						100		75	7,455 00	5
26000	375	90000		1500	475	200	75					300	150	200	124,657 50	6	
2000	150	20000			60	30	15						20	50	50	1,942 50	7
1500	175				90	40	10					100	30	40	1,762 50	8	
8000	450	150000	25		180	20	50						60	90	8,115 00	9	
9000	500	320000			54	25	29						30	60	10,928 00	10	
6000	42				60	15	15						40	50	1,834 00	11	
1500	700				60	30	24				80		45	175	4,840 00	12	
2200								900							530 00	13	
										700					2,800 00	14	
					6					3	106				1,099 00	15	
2000								1500		600					2,950 00	16	
250					1				250		45				529 50	17	
78950	2819	645000	26	1500	1230	435	275	2400	250	1303	407	400	510	885			
15796	12685	12900	364	112500	5535	1523	688	240	25	5212	4070	160	765	442	172,899 00		

RETURN showing the Kinds, Quantities and Value of Fish, &c.—Nova Scotia—*Con.*

Number.	Districts.	KINDS OF FISH.														FISH PRODUCTS.				Total Value.	Number.				
		Mackerel, fresh or pres. (in cans), lbs.	Lobsters, preserved, in cans, lbs.	Lobsters, alive or fresh, tons.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Hake, dried, cwt.	Haddock, cwt.	Pollock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Alewives, brls.	Clams, brls.	Eels, brls.	Squid, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Coarse and mixed fish, brls.			Fish Oils, galls.	Fish used as Bait, brls.	Fish used as Manure, brls.	Fish Guano, tons.
<i>Lunenburg County.</i>																									
1	Lunenburg Harbour, Upper and Lower So. Rose Bay, and Kingston, and from Black Rocks to Blue and Back Harbour and Cross Island	44700		320	75997	125	1033	436	180	132000	250	65	150	20	125			200		28512	550		287	437,065 80	1
2	LaHave Riv. and from Rit- cey's Cove to New Dublin	20784		280	88203	140	296	925	750	140000	20000	45	50	10	25			750		28000	250		50	471,136 46	2
3	Petite Riviere to County Line	200		200	6208	19	10	89	120	8000	1000	35	15	10	10			425		2800	185		15	54,928 75	3
4	Chester	200	50256	2	1050		60	40	175	1000	800	4500	150		38	90	9500	650	120	260	150	70		33,788 84	4
5	Malbone Bay and Martin's River			1	45000	48	450	85	75	450	3400	3500	15	5	22	45	3000	450	65	7500	1600			216,178 00	5
6	Fox Point	500		1	950		125	70	260	800		350			5	55	5000	80	120	300	50	40		11,929 00	6
7	Mill Cove			1	225		55	15	175	160		225			5	25	3000		25	80	45	45		3,854 25	7
8	Lodge			2	150		75	30	42		260		2				10	1200		8	75	30		1,780 00	8
9	North-west Cove			4	220	1	70	80	65		200		3		4	11	2000		12	130	40	12		5,716 00	9
10	Aspotogan		43632	2	225		45	42		250					3	8	650		6	75	28	12		9,451 23 10	10
11	Sandy Beach				250		20		55		240		1		4	4	3000		8	95	12	8		2,692 50 11	11
12	Blandford				1000		25	350		2500			3		5	16	20	350	125	900	45	60		9,414 50 12	12
13	Little Tancook	200			530		30	115	70		960			1		4	950		18	220	15	12		12,793 50 13	13
14	Big Tancook	28500			575		375	140		1050					10	10	1100		50	375	50	225		59,512 50 14	14
15	Deep Cove				55				20	225		525	18		20	70	600			35	6	8		4,167 75 15	15
Totals		900 187872	810	220638	333	885	2219	2919	3685	289660	30350	337	226	157	512		32500	2905	557	69357	3056	510	352	.....
Values		108	26302	60750	992871	33330	2213	7767	7298	369	28966	1518	1348	1582	1570	2048	1625	145	1114	27743	4584	255	2816	1,334,509 08	

RETURN showing the Number, Tonnage and Value of Vessels and Boats and

[illegible]

RETURN showing the Number and Value of Vessels and Boats, and all Fishing Material, &c.—Nova Scotia—Continued.

Number.	FISHING VESSELS AND BOATS.				FISHING MATERIALS.				KINDS OF FISH.				Number.					
	Vessels.				Boats.		Gill-nets.		Trap-nets.		Seines.			Trawls.				
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Number.	Value.	Number.		Value.	Salmon, fresh, in ice, lbs.	Herring, salted, brls.	Mackerel, salted, brls.	Mackerel, fresh or pre-served, in cans, lbs.
Shelburne County.																		
1	Barrington	3	85	4000	25	60	1600	66	14000	1300					300	325		1
2	Wood's Harbour	5	123	4200	46	140	2700	134	19000	1860						1600		39000
3	Shag Harbour	3	52	1300	26	75	1500	50	16000	1300		1	2000	1	500	2000		2500
4	Bear Point	3	51	700	25	25	600	25	9600	1000								3
5	Cape Island	28	550	32000	300	400	8000	500	58500	6000		6	11000		1400	8000		330000
6	Port La Tour and Baccaro	2	100	3000	19	280	3650	145	51000	6500						9000		3500
7	Upper Port La Tour	3	50	1200	18	38	450	37	15000	560						800		6
8	Cape Negro and Blanche	1	20	600	9	83	1050	75	13000	1000		1	1500			1800	20	2000
9	Cape Negro Island					65	1400	62	16600	1150						2500	10	2100
10	Port Clyde					6	60	6	600	30					3200			10
11	North-east Harbour	2	57	2000	12	14	1200	30	6400	1050					1500	800	8	11
12	Black Point, Red Head and Round Bay	2	39	1450	12	52	3000	77	16000	2600						1250	50	12
13	Roseway and McNutt's Island					55	3800	87	15900	2500						1900	60	13
14	Gunning Cove, Churchover, and Brechtown	1	13	300	5	50	1800	78	8300	1385					360	1790		14
15	Shelburne and Sandy Point	10	540	17000	110	55	1450	76	19500	3300					1100	2200	65	15
16	Jordan	2	113	3600	23	48	1480	66	12500	2080					8000	450		16
17	Lockeport	24	1200	65000	250	110	8500	280	30000	6500					800	4000	50	17
	Totals	89	2893	136350	880	1556	42240	1794	321900	40115		8	14500	2	650	1852	11096	375600
	Values														3052	162518	3682	45072

RETURN showing the Number and Value of Vessels and Boats, and all Fishing Material, &c.—Nova Scotia—Continued.

Number.	DISTRICTS.	KINDS OF FISH.										FISH PRODUCTS.		TOTAL VALUE.	Number.			
		Lobsters, preserved in cans, lbs.	Lobsters, alive or fresh, tons.	Cod, dried, cwt.	Hake, dried, cwt.	Haddock, cwt.	Pollock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Alewives, brls.	Clams, brls.	Eels, brls.			Tom-cod or frost fish, lbs.	Fish oils, galls.	Fish used as bait, brls.
<i>Shelburne County.</i>																		
1	Barrington	79392	92	2900	2100	200	560	1000	325	690	30	30	400	1200	2000	36,264 75	1	
2	Woods Harbour	23808	85	1100	165	100	200	800	180	30	30	30	400	300	5000	88,072 38	2	
3	Shag Harbour	86928	50	500	100	80	200	2000	180	30	30	30	400	72	575	28,242 12	3	
4	Bear Point	17424	225	2350	4400	400	2000	110000	200	200	60	50	50	6000	8000	8,431 30	4	
5	Cape Island	17760	210	500	325	200	610	2500	950	425	70	5	5	4500	1400	248,489 92	5	
6	Port La Tour and Baccaro	17760	75	1050	150	60	900	300	2100	70	60	5	5	375	500	65,400 00	6	
7	Upper Port La Tour	17760	40	475	7	375	30	2100	60	60	60	8	8	225	500	12,902 50	7	
8	Cape Negro and Blanche	17424	310	550	630	200	950	1400	200	200	200	50	50	375	500	40,424 36	8	
9	Cape Negro Island	17760	210	500	325	200	610	2500	950	425	70	5	5	225	500	40,424 36	9	
10	Port Clyde	17760	75	1050	150	60	900	300	2100	70	60	5	5	1800	900	33,599 50	10	
11	North-east Harbour	17760	40	475	7	375	30	2100	60	60	60	8	8	500	500	15,877 00	11	
12	Black Point, Red Head and Round Bay	17760	10	550	25	500	45	1000	10	10	10	5	5	475	500	13,507 50	12	
13	Roseway and McNutt's Island	17760	53	850	10	350	175	400	500	50	50	8	8	600	500	13,000 00	13	
14	Gunning Cove, Churehover, and Birchtown	17760	25440	10000	14	200	75	5000	5500	75	150	5	5	2800	500	14,039 50	14	
15	Shelburne and Sandy Point	24000	45	2380	340	10	2400	6000	5000	50	50	750	750	750	750	68,059 10	15	
16	Jordan	24000	200	26320	1120	1344	780	2000	6000	45	45	768	10	2500	500	19,915 00	16	
17	Lockeport	274752	2057	62925	1184	12554	4905	10770	137450	5505	1705	1008	108	400	22897	19575	172,570 00	17
	Totals	38465	221775	283163	2960	43939	12263	1077	13745	275	6820	7056	1080	20	9159	29363	885,482 33	
	Values																	

RECAPITULATION

Of the Yield of the Fisheries of District No. 3, Nova Scotia, 1896.

Kinds of Fish.	Quantities.	Rate.		Value.		Total.	
		\$	cts.	\$	cts.	\$	cts.
Salmon, fresh.....	Lbs. 212,373	0	20	42,474	60		
do smoked.....	" 4,148	0	20	829	60	43,304	20
Herring, salted.....	Brls. 101,328	4	50	455,976	00		
do fresh.....	Lbs. 103,995	0	01	1,039	95		
do smoked.....	" 681,900	0	02	13,638	00	470,653	95
Mackerel, salted.....	Brls. 7,045	14	00	98,630	00		
do fresh.....	Lbs. 391,500	0	12	46,980	00	145,610	00
Lobsters, canned.....	" 1,172,584	0	14	164,161	76		
do fresh or alive.....	Tons. 7,184½	75	00	538,837	50	702,999	26
Cod, dried.....	Cwt. 358,135	4	50	1,611,607	50		
do (boneless).....	Lbs. 212,000	0	08	16,960	00		
do tongues and sounds.....	Brls. 472	10	00	4,720	00	1,633,287	50
Haddock, dried.....	Cwt. 65,367	3	50	228,784	50		
do finnan haddies.....	Lbs. 321,000	0	08	25,680	00	254,464	50
Hake, dried.....	Cwt. 45,365	2	50	113,412	50		
do sounds.....	Lbs. 9,073	0	50	4,536	50	117,949	00
Pollock, dried.....	Cwt. 36,825	2	50			92,062	50
Trout.....	Lbs. 39,455	0	10			3,945	50
Halibut.....	" 695,440	0	10			69,544	00
Bass.....	" 2,650	0	10			265	00
Smelts.....	" 144,255	0	05			7,212	75
Alewives, salted.....	Brls. 9,711	4	00	38,844	00		
do smoked.....	Lbs. 36,000	0	01	360	00	39,204	00
Shad.....	Brls. 989	10	00			9,890	00
Eels.....	" 735	10	00			7,350	00
Squid.....	" 6,160	4	00			24,640	00
Clams.....	" 2,476	7	00			17,332	00
Sardines.....	" 200	4	00			800	00
Flounders.....	Lbs. 33,550	0	05			1,777	50
Tom cod.....	" 48,805	0	05			2,440	25
Coarse fish.....	Brls. 3,882	2	00			7,764	00
Whitefish.....	" 69	10	00			690	00
Fish oil.....	Galls. 153,097	0	40			61,238	80
do bait.....	Brls. 40,691	1	50			61,036	50
do manure.....	" 4,367	0	50			2,183	50
do guano.....	Tons. 530	8	00			4,240	00
Total for 1896.....						3,781,884	71
Total for 1895.....						3,715,572	96
Increase.....						66,311	75

TABLE showing the Number and Value of Fishing Vessels, Boats, Nets, &c., used in the District No. 3, Nova Scotia, including an Estimate of other Fixtures not included in Returns, 1896.

Fishing Material.	Value.	Total.
	\$	\$
386 fishing vessels (20,005 tons.)	766,785	
4,866 boats	127,148	
1,062,423 fathoms of gill-nets	202,848	
209,904 do of (286) seines	87,840	
136 trap-nets	69,060	
87 weirs	13,340	
11 smelt nets	650	
240 dip-nets	240	
4,230 trawls	74,232	
34 lobster canneries (477 hands)	24,700	1,342,143
191,152 do traps	99,060	
1,642 smoke or fishhouses	100,488	123,760
1 drying fishhouse	7,000	
123 freezers and icehouses	14,080	
36 fishing steamers and smacks	42,410	
583 piers and wharfs	76,266	
		240,244
Total		1,706,147

RECAPITU

RETURN showing the Number and Value of Vessels and Boats engaged in the
Number of Men employed in the Fishing Industry of

Number.	COUNTIES.	FISHING VESSELS AND BOATS.						FISHING					
		Vessels.				Boats.		Gill-Nets.		Trap-Nets.		Weirs.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Fathoms.	Value.	Number.	Value.	Number.	Value.
				\$			\$		\$		\$		\$
1	Cape Breton	12	199	3,900	65	771	18,242	1,330	60,885	26,774	1	300	...
2	Inverness	25	480	13,100	123	845	15,383	2,090	68,242	24,353	1	700	52 416
3	Richmond	74	2,417	36,095	562	1,521	24,497	2,074	258,090	72,050	...	5	80
4	Victoria	4	85	1,400	21	911	15,341	1,394	55,739	17,736	2	1,000	...
5	Antigonish	2	55	1,600	11	181	2,639	240	66,450	7,542	...	...	...
6	Colchester . . . . .	...	...	...	...	112	2,092	210	16,140	2,402	...	13	3,350
7	Cumberland	4	92	1,000	17	154	5,015	190	3,070	1,030	...	3	100
8	Guysborough	27	601	15,480	159	2,266	58,754	2,620	368,500	105,592	57	11,000	...
9	Halifax	59	1,531	39,315	367	2,575	39,303	2,607	283,612	38,658	10	1,150	...
10	Hants . . . . .	...	...	...	...	73	1,280	81	7,318	1,568	...	13	810
11	Pictou . . . . .	...	...	...	...	274	5,326	485	9,118	4,070	...	...	...
12	Annapolis	13	477	14,310	111	223	4,460	359	23,400	11,700	...	18	3,050
13	Digby	54	1,346	41,500	424	393	17,620	747	60,135	24,890	1	1,500	27 2,390
14	King's	8	117	2,400	25	69	1,311	115	4,470	2,040	35	200	39 7,250
15	Lunenburg	171	12,290	487,600	2,423	1,612	46,310	1,510	583,500	99,450	81	32,700	...
16	Queen's	16	810	31,900	126	503	9,557	512	27,168	10,877	5	1,660	...
17	Shelburne	89	2,893	136,350	880	1,556	42,240	1,794	321,900	40,115	8	14,500	...
18	Yarmouth	35	2,072	52,725	487	510	5,650	816	41,850	13,776	6	18,500	3 650
	Totals	593	25,465	878,675	5,801	14,549	315,020	19,174	2,259,587	504,623	207	83,210	173 18,096

LATION.

Fisheries, Fishing Materials, and the Kinds and Quantities of Fish, as well as the of the Province of Nova Scotia, for the Year 1896.

MATERIAL.			KINDS OF FISH.										
Seines.			Salmon, salted, brls.	Salmon, fresh in ice, lbs.	Salmon, preserved in cans, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh or frozen, lbs.	Herring, smoked, lbs.	Mackerel, salted, brls.	Mackerel, fresh or preserved in cans, lbs.	Lobsters, preserved in cans, lbs.	Number.
Number.	Fathoms.	Value.											
		\$											
2	250	500	106	31,647	2,816	.....	3,643	15,900	5,000	1,581	500	448,062	1
3	525	600	16	68,535	480	.....	9,748	111,000	.....	2,916	6,400	239,620	2
1	120	60	259	8,220	1,828	.....	12,905	.....	.....	4,118	.....	514,680	3
							3,984	.....	.....	1,091	.....	294,116	4
				33,150			1,984	.....	.....	371	.....	183,760	5
				53,313				.....	23,000	.....	.....	17,948	6
8	260	50		14,050			212	1,800	1,100	2	400	492,674	7
29	3,270	3,740		50,985	3,000	1,300	13,499	218,400	.....	6,303	1,315,877	836,416	8
411	42,875	62,355		22,288		2,335	10,842	13,000	1,500	1,885	2,640	751,967	9
				10,515			11	2,000	.....	.....	.....	.....	10
				26,100			80	42,800	.....	33	.....	502,373	11
				20,550			4,435	.....	7,000	10	15,000	.....	12
33	3,650	9,225		4,350			416	59,420	23,000	.....	.....	44,000	13
13	6,144	3,400		78,950			2,819	.....	645,000	26	.....	.....	14
227	195,960	71,380		39,138		2,788	29,053	44,575	4,900	1,323	900	187,872	15
11	1,550	3,185		30,425		1,360	4,980	.....	.....	668	.....	157,344	16
2	2,600	650		15,260			36,115	.....	.....	263	375,600	274,752	17
				23,700			23,510	.....	2,000	4,755	.....	508,616	18
740	257,204	155,145	408	537,926	8,124	7,783	158,236	508,895	712,500	25,345	1,717,317	5,363,300	

RECAPITU

RETURN showing the Kinds and Quantities of Fish,

Number.	COUNTIES.	KINDS OF FISH.										
		Lobsters, fresh or alive, tons.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Hake dried, cwt.	Hake, sounds, lbs.	Haddock, cwt.	Pollock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Bas, lbs.
1	Cape Breton.....	23 $\frac{3}{4}$	13,460	24	53	.....	2,364	134	5,390	60,550	13,500	110
2	Inverness.....	139	23,511	50	4,418	1,625	2,516	.....	23,900	13,992	40,600	400
3	Richmond.....	8	28,669	13	.....	.....	7,460	1,533	.....	24,470	33,800	.....
4	Victoria.....	2 $\frac{1}{2}$	16,673	.....	238	.....	1,040	.....	6,485	12,300	63,807	.....
5	Antigonish.....	.....	709	.....	1,774	5,497	160	.....	1,400	.....	15,300	.....
6	Colchester.....	.....	115	.....	.....	.....	21	.....	4,450	.....	13,400	1,200
7	Cumberland.....	3	310	.....	11	.....	95	32	1,400	2,400	64,500	.....
8	Guysborough.....	26	24,265	15	1,279	1,550	19,628	1,494	26,460	175,250	39,760	1,000
9	Halifax.....	261 $\frac{1}{2}$	17,374	.....	1,680	1,920	3,698	2,817	7,670	32,605	48,595	.....
10	Hants.....	.....	58	.....	.....	.....	5	.....	10,000	700	.....	1,220
11	Pictou.....	.....	226	.....	112	.....	.....	.....	1,350	.....	17,400	.....
12	Annapolis.....	60	6,865	33	8,112	3,720	14,152	5,447	12,100	67,000	2,000	2,400
13	Digby.....	23 $\frac{1}{2}$	25,514	67	35,015	5,353	28,852	17,998	.....	93,500	.....	.....
14	King's.....	1,500	1,230	.....	.....	.....	435	275	2,400	.....	.....	250
15	Lunenburg.....	810	220,638	333	885	.....	2,219	2,919	3,685	289,660	30,350	.....
16	Queen's.....	279	7,128	.....	64	.....	480	301	.....	41,330	.....	.....
17	Shelburne.....	2,957	62,925	.....	1,184	.....	12,554	4,905	10,770	137,450	5,505	.....
18	Yarmouth.....	1,555	33,835	39	105	.....	6,675	4,980	10,500	66,500	106,400	.....
	Totals.....	7,627 $\frac{1}{4}$	483,505	574	54,930	19,665	102,354	42,835	127,960	1,017,707	494,897	6,580

LATION.

Province of Nova Scotia, for the Year 1896—Continued.

KINDS OF FISH.									FISH PRODUCTS					TOTAL VALUE.	Number.
Alewives, brls.	Oysters, brls.	Clams, brls.	Eels, brls.	Shad, brls.	Squid, brls.	Flounders, lbs.	Tom Cod or Frost Fish, lbs.	Coarse and Mixed Fish, brls.	Fish Oils, galls.	Seal Skins, No.	Fish used as bait, brls.	Fish used as manure, brls.	Fish guano, tons.		
429	53	94	384	11	789	2,000	1,500	3	6,491	820	3,124	.....	190	197,214	63
670	786	229	732	15	3,487	.....	.....	415	12,998	.....	4,753	60	271	301,966	70
1,400	.....	418	230	.....	487	72,130	23,250	380	12,527	.....	1,246	.....	.....	343,721	75
42	725	43	288	.....	2,758	.....	2,500	10,691	8,994	262	3,905	.....	.....	200,644	39
204	90	.....	195	.....	.....	.....	.....	95	2,105	.....	824	.....	.....	63,662	00
134	54	.....	2	403	.....	.....	.....	.....	38	.....	.....	40	.....	20,172	00
680	450	.....	10	375	.....	.....	.....	.....	45	.....	470	1,200	.....	88,184	00
2,097	.....	319	816	.....	6,575	.....	6,340	95	37,231	.....	19,035	4,410	.....	646,116	00
1,130	2	629	120	.....	146	.....	400	130	10,154	21	1,281	6,140	.....	335,073	00
404	.....	.....	312	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,379	00
150	300	.....	75	.....	.....	.....	.....	.....	.....	.....	1,090	1,175	.....	83,877	00
176	.....	700	5	220	5,250	2,000	2,000	3,000	3,270	.....	4,085	430	178	200,338	00
.....	.....	452	.....	326	.....	1,050	3,500	325	44,610	.....	10,533	517	.....	437,946	20
1,303	.....	.....	407	.....	.....	.....	.....	.....	400	.....	510	885	.....	172,899	00
337	.....	226	157	.....	512	32,500	2,905	557	69,357	.....	3,056	510	352	1,334,509	08
900	.....	.....	30	6	.....	.....	.....	.....	3,738	.....	313	.....	.....	126,488	36
1,705	.....	1,008	108	.....	.....	.....	400	.....	22,897	.....	19,575	.....	.....	885,482	33
5,290	.....	90	435	30	398	.....	40,000	.....	8,825	.....	2,619	2,025	.....	624,221	74
17,051	2,460	4,208	3,587	2,105	20,402	109,680	82,795	15,691	243,650	1,103	76,419	17,392	991	6,070,895	18

NOTE—Add to value of No. 2, 6,500 lbs. dogfish..... \$ 65
do No. 4, 183,000 do 1,830
do No. 12, 200 brls. sardines..... 800
do No. 16, 69 brls. whitefish..... 690
do No. 18, 212,000 lbs. boneless cod..... 16,960
do do 21,000 lbs. finnan haddies..... 1,680
do do 36,000 lbs. smoked alewives..... 360

RECAPITULATION

OF the Yield and Value of the Fisheries of the whole Province of Nova Scotia, for the year 1896.

Kinds of Fish.	Quantities.	Rate.	Value.	Total.
		\$ cts.	\$ cts.	\$ cts.
Salmon, pickled..... Brls.	408	16 00	6,528 00	
do fresh..... Lbs.	537,926	0 20	107,585 00	
do canned..... "	8,124	0 15	1,218 60	
do smoked..... "	7,783	0 20	1,556 60	116,888 20
Herring, pickled..... Brls.	153,236		689,352 00	
do fresh..... Lbs.	508,895		5,406 20	
do smoked..... "	712,500	0 02	14,250 00	709,008 20
Mackerel, pickled..... Brls.	25,345	14 00	354,830 00	
do fresh or preserved..... Lbs.	1,717,317		113,754 00	468,584 00
Lobster, preserved, in cans..... "	5,363,300	0 14	750,860 68	
do fresh, in shell..... Tons.	7,627 $\frac{1}{4}$	75 00	572,044 25	1,322,904 93
Cod, dried..... Cwt.	483,505		2,134,615 50	
do (prepared, boneless)..... Lbs.	212,000	0 08	16,960 00	
do tongues and sounds..... Brls.	574	10 00	5,740 00	2,157,315 50
Haddock, dried..... Cwt.	102,354		341,515 50	
do (finnan haddies)..... Lbs.	321,000	0 08	25,680 00	367,195 50
Hake, dried..... Cwt.	54,930		134,969 50	
do sounds..... Lbs.	19,665		9,832 00	144,801 50
Pollock, dried..... Cwt.	42,835			106,253 00
Trout..... Lbs.	127,960	0 10		12,796 00
Halibut..... "	1,017,707	0 10		101,770 70
Smelts..... "	494,897	0 05		24,744 10
Bass..... "	6,580	0 10		658 00
Eels..... Brls.	3,587	10 00		35,870 00
Shad..... "	2,105	10 00		21,050 00
Alewives..... "	17,051	4 00	68,933 50	
do smoked..... Lbs.	36,000	0 01	360 00	67,293 50
Oysters..... Brls.	2,460	4 00		9,840 00
Clams..... "	4,208			28,672 00
Squid..... "	20,402	4 00		81,608 00
Sardines..... "	200	4 00		800 00
Flounders..... Lbs.	109,680	0 05		5,484 00
Tom-cods..... "	82,795	0 05		4,139 75
White fish..... Brls.	69	10 00		690 00
Coarse fish..... "	15,691			42,711 00
Dog fish..... Lbs.	189,590	0 01		1,895 00
Seal skins..... No.	1,103			1,373 50
Fish oil..... Galls.	243,650	0 40		97,458 80
Fish as bait..... Brls.	76,419	1 50		114,628 50
do as manure..... "	17,392	0 50		8,696 50
do guano..... Tons.	991			15,765 00
Total for 1896.....				6,070,895 18
do 1895.....				6,213,131 07
Decrease.....				142,235 89

TABLE showing the Lobster Plant, and Number of Employees in Canneries, also other Fixtures used in the Fishing Industry, not included in previous returns, in Nova Scotia, 1896.

COUNTIES.	LOBSTER PLANT.				Number of hands employed.	OTHER FIXTURES USED IN FISHERIES.							
	Canneries.		Traps.			Freezers and Ice houses.		Smoke and Fish houses.		Piers and wharfs.		Tugs, Steamers and Smacks.	
	Number.	Value.	Number.	Value.		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
		\$		\$			\$		\$		\$		\$
Cape Breton.....	14	16550	31500	18865	515	7	227	311	8525	104	4910	18	1975
Inverness	16	12100	36485	18385	300	18	1995	346	13478	65	29860	5	390
Richmond	17	9650	54605	27300	503	4	2200	230	5900	20	1690	26	1477
Victoria	17	4660	19080	11535	252	3	200	296	20387	58	15750	7	630
Antigonish	5	7800	25627	15130	141	.....	.....	50	970	1	100	5	700
Colchester	1	1200	1190	770	7	.....	.....	3	75	.....	.....	.....	.....
Cumberland	21	15625	24958	13759	254	.....	.....	.....	.....	.....	.....	.....	.....
Guysboro'	23	39800	98226	54641	650	29	18830	586	42755	231	28977	32	22620
Halifax	27	18850	59479	24050	305	8	525	985	25448	747	16027	4	3250
Hants .....	.....	.....	.....	.....	.....	.....	.....	5	80	.....	.....	.....	.....
Pictou	26	41150	45400	29650	431	.....	.....	.....	.....	9	260	.....	.....
Annapolis	1	1000	9175	6869	6	16	890	135	5090	.....	.....	.....	.....
Digby	3	1450	18275	9533	30	43	2730	110	9230	30	17350	.....	.....
King's .....	.....	.....	.....	.....	.....	25	1260	75	4580	.....	.....	.....	.....
Lunenburg	9	4550	20850	6250	118	7	1675	572	38220	322	25000	15	3550
Queen's	7	2000	11877	4658	77	.....	.....	179	3863	32	741	6	535
Shelburne	8	9600	81875	47200	129	19	4000	363	21025	168	21575	7	1925
Yarmouth	6	6100	49100	24550	117	13	3525	208	18480	31	11600	8	36400
Totals	206	192085	587612	313145	3839	192	38057	4454	218106	1818	173340	133	73552

RECAPITULATION

SHOWING the Number and Value of Fishing Vessels, Boats, Nets, &c., in the whole Province of Nova, Scotia for the year 1896.

Article.	Value.	Total.
	\$	\$
593 Vessels, 25,565 tons.....	878,675	
14,549 Boats.....	315,020	
2,259,587 Fathoms gill-nets.....	504,623	
740 Seines, 257,204 fathoms.....	155,145	
207 Trap-nets.....	83,210	
8,992 Trawls.....	94,771	
173 Weirs.....	18,096	
180 Smelt nets.....	2,707	
240 Dip-nets.....	240	
		2,052,487
206 Canneries (3,839 hands).....	192,085	
587,612 Traps.....	313,145	
		505,230
192 Freezers and icehouses.....	38,057	
4,454 Smoke houses and fish-houses.....	218,106	
1,818 Piers and wharfs.....	173,340	
133 Steamers and smacks.....	73,552	
3,753 Hand lines.....	1,981	
1 Drying fishhouse.....	7,000	
		512,036
Total value.....		3,069,753

APPENDIX No. 4.

NEW BRUNSWICK.

District No. 1, comprising the county of Charlotte.—*Inspector J. H. Pratt, St. Andrews.*

District No. 2, comprising the counties of Restigouche, Gloucester, Northumberland, Kent, Westmorland and Albert.—*Inspector R. A. Chapman, Moncton.*

District No. 3, comprising the counties of St. John, King's, Queen's, Sunbury, York, Carleton and Victoria.—*Inspector H. S. Miles, Oromocto.*

DISTRICT No 1.

REPORT ON THE FISHERIES OF DISTRICT No. 1, NEW BRUNSWICK,
COMPRISING THE COUNTY OF CHARLOTTE, FOR THE YEAR 1896,
BY INSPECTOR JOHN H. PRATT.

ST. ANDREWS, N.B., 2nd January, 1897.

Honourable L. H. DAVIES,
The Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit herewith my eighth annual report on the fisheries of District No. 1, N.B., comprising the county of Charlotte, and including the islands at mouth of bay, with the fisheries of Chiputneticook lakes. These lakes extend from St. Croix northward, along the international boundary line between the province of New Brunswick and the state of Maine. Tabulated statements giving quantities and values of each kind of fish are also herewith, together with a synopsis of the several officers fisheries reports to me.

Considering the low prices paid during the year to the fishermen, a very favourable season is shown, when compared with previous seasons. An increase of \$142,280.26 in the value of the catch over the previous year of 1895, will be noticed,

The value of the catch for the past season is as follows:—

Total value of fisheries for 1895.....	\$ 968,203 50
do do 1896.....	1,110,483 76

Increase in value during 1896..... \$ 142,280 26

I have already forwarded your department a preliminary report of the fisheries of the district controlled by me, which dealt with the fisheries during the past season of 1896, but there are other matters which may be necessary to be further reported on in this my annual report for the season. I have already made special reports on various matters during the past year, which need not be touched on here.

I would also desire to draw your attention to the fact that numbers of vessels come into this district and catch their loads of fish and the returns for those cargoes do not enter into the accompanying statistics, but will probably be found in the returns from some other district, probably in the Nova Scotia returns. Most of the visiting fishing schooners hail from ports in that province.

During the past season I made several cruises in this ship on the Nova Scotia coast, and during the spring and autumn visited the coast of Cape Breton. I was principally employed there in protecting the three mile limit from the encroachments of United States fishing vessels and in enforcing the observance of the fishery laws by Canadian fishermen.

The lobster regulations seemingly offer the greatest temptation to our fishermen to violate them, but I am pleased to say several very good lessons were taught them at a number of places I called at, where fishing was attempted.

However, I have dealt with all matters relating to cruising in the "Curlew" in my annual report on the ship's work for the past year, which will be found elsewhere in your departmental reports.

SALMON.

Although this fish is not taken for commercial purposes in this district, numbers of them are taken by sportsmen with the rod and fly on the St. Croix River. Overseer Todd reports an increase of the salmon in the St. Croix over all previous years. Some poaching was attempted by a number of turbulent characters, who still reside along that river, but owing to the vigilance of Overseer Todd and his associates on the Canadian and American sides of the stream, little if any success attended the poachers' efforts at netting. It seems impossible to do without the special guardian services on the St. Croix River during the past few seasons, and I would strongly urge their re-appointment during the coming season, between April and November.

Several contradictory stories are told regarding salmon ascending the Magaguadavic River during the past season, but the reports have not been fully verified. The river is being narrowly watched by numbers of persons interested in its welfare as a salmon river, and the first favourable results will be immediately reported to your department.

HAKE.

About double the catch of hake is reported this year over that of 1895. It is not, I believe, that the fish were any more plentiful than formerly, but the great decrease in the schools of dog-fish on our shores, gave the fishermen more encouragement to engage in this fishery. It was quite a common sight in 1895 and former years for a man to haul his trawls and find one-half of the hooks holding a dog-fish when the owner of the trawl earnestly hoped they would have been occupied by hake, haddock or cod.

POLLOCK.

An immense increase will be noticed in the catch of pollock. In the Quoddy River, especially, they were very plentiful, but the prices paid for them were so low, that numbers of the fishermen went at some other branch of the business.

HADDOCK.

An increase of 3,000 quintals over that of last year is noticed in the haddock catch. They were quite plentiful at certain periods during the season, and brought a ready sale at the different markets. The principal cause of the increase in the catch is mainly due to the fewer schools of dog-fish this year on the grounds. The prices paid for haddock continued quite low all season.

MACKEREL.

Mackerel were not found in this district during 1896, I very much regret to say. The catch of 81 barrels reported in the returns were caught in the Gulf of St. Lawrence during the summer by two vessels which were owned and fitted out in this district.

In the memory of "the oldest inhabitant," the mackerel frequenting the Passamaquoddy waters have appeared and disappeared in a most irregular manner. It is now several years since any were taken here, but we need not be surprised if in the very near future they appeared in the Passamaquoddy waters again.

COD.

The catch of cod remains about the same as last season, over 9,000 quintals. During the year they were fairly plentiful, but the prices paid the fishermen were very low. The above would not represent the catch of cod in the district, as many vessels hailing from other districts did not report their catches here. Dog-fish did not trouble the cod fishermen as in 1895.

On account of the light demand in the market for all kinds of line fish, together with the poor prices paid, numerous fishermen turned their hands to other work, which offered better financial results.

LOBSTERS.

Only a slight decrease is noticed in the catch of lobsters, when compared with last season. The fishery was prosecuted by about the same number of fishermen and the demand for all sizes was good at remunerative prices.

It is a pleasure to note the increasing value of this fishery year by year, and the manifest desire of even the fishermen themselves that stringent measures should be enacted for its preservation. Even with all the precaution taken, and the sentiment of the fishermen condemning the violations, a number of disreputable characters will secretly set traps in several out of the way places. I destroyed several hundred traps during the past fall, and I hope to secure the names of some of the guilty parties, that they may be suitably punished.

Owing to the lobster regulations now in force in the State of Maine, prohibiting the catching of lobsters at any time under $10\frac{1}{2}$ inches in length, some of the lobster canners have come to the Canadian side and erected factories. Their presence has given considerable employment to a large number of people, and been of great benefit to all, by canning the small lobsters on our side instead of the United States.

The canneries in this district during the season packed 3,424 cases, while in former seasons not more than 170 or 200 cases would be the total pack. The feeling is increasing among the fishermen of the district, and in fact in the whole Bay of Fundy, that the size limit of 9 inches, under which size none shall be caught, should be raised to $10\frac{1}{2}$ inches. Although the fishermen are aware that the raising of the legal size limit will prevent lobster canning, yet they believe unless something of this kind is done speedily, the lobsters will slowly but surely decrease in numbers and size. It is remarkable the various opinions at present existing among fishermen and dealers as to the measures necessary for the restocking of our waters, and the preservation and increase of the lobster fisheries. It makes it extremely difficult to frame suitable laws when such differences exist.

HERRING.

I have great pleasure in reporting that in spite of the alarming reports in circulation, that the herring have all been destroyed in the Bay of Fundy, they are just as plentiful as ever. The supply in Charlotte County seems to be governed simply by the demand. Like all deep-sea fish, herring are somewhat erratic in their movements, and do not always frequent the same locality during successive seasons. This leads to the opinion, often loudly expressed to those who do not give the matter proper study and attention, that "the herring fishery is totally ruined." I have in my possession the report of a commission appointed by the House of Assembly of this province in 1836, to inquire into the herring fishery of Grand Manan, it having been reported as declining greatly and almost ruined.

Owing to frequent strikes during the year of the employees in the sardine canneries on the United States side, the demand for small herring was very irregular, and when caught in a weir were often liberated on account of no purchasing boats having left Eastport. During the fall months herring of a large size were very plentiful at Grand Manan, and big hauls were made in the weirs and gill-nets. This shows that the statement of the herring fishery being ruined is the same "old, old story." I do not deny but what proper regulations for the government of this fishery, should be enforced, and unnecessary waste must be guarded against. Prices for herring, whether fresh or cured, ruled very low all the season. The market for canned sardines was very dull, and the rates quoted by the New York selling agents touched a lower point this year than ever before. In fact the price went lower than the cost of manufacture, and it was deemed advisable to store thousands of cases at the factories in anticipation of a future rise in value. During last winter no net herring were caught on the "north shore" of the Bay of Fundy, and various conflicting reasons are assigned by those interested as to the cause of their non appearance during the winter season. Some advance the theory that it is owing to net fishing of spawn herring, others, that weir fishing for small herring is the cause, and others again assert that the weirs on the spawning ground is one of the principal causes of the decline of the winter herring fishery. This matter has been the subject of much interesting debate in years gone by, and will doubtless be in the future. However, we have the experiences of the rise and decline of the herring fisheries of other countries to profit by. During the year 309 herring weir licenses were issued, against 355 issued in 1895. Not more than two thirds of those weirs were built.

CAMPOBELLO FISH FAIR.

Before closing my report, I would wish to make reference to the beneficial effects of this fair on the fisheries of this district. Its objects are of the best, and deserve the hearty support of the fishermen and all those interested in the fisheries of the county. Notwithstanding the fact that the day appointed for this fair and sports to be held at Welchpool by the Campobello Fisheries Society, was a stormy and very disagreeable one, the splendid programme prepared by them was carried out to the letter. Beautiful exhibits of all kinds of cured fish were on view in the exhibition rooms on the wharfs of James Calder, Esq. I do not believe those exhibits could be excelled in any part of the world, and were inspected by hundreds of admiring visitors during the day. The aquatic sports, consisting of sailing and rowing races for different classes of boats, took place in the afternoon, and excited intense interest. The annual dinner of the society took place in the evening, at which many distinguished residents of the county were present. A grand ball, which was largely attended, finished the day's festivities. It is needless for me to dilate on the great benefits derived by our fishermen from the competition necessary to secure the handsome prizes offered for the best cured fish. It has a stimulating effect on the better curing of the several varieties of fish, placed on the various markets for sale.

If delegates from the several districts of the county were sent to this fair, and a formal conference held, relative to matters affecting the fishing interests of the county, considerable benefit would result from the interchange of ideas. Nearly all branches of business are now organized for mutual help and protection, but fishermen are not, and this in a manner accounts for the diversified opinions held by them regarding all matters affecting the fisheries.

SYNOPSIS OF OFFICERS' REPORTS.

Overseer Brown, of Campobello, reports a decrease in the aggregate value of the catch in his district this season, owing to the low price of fish and to the smaller number of men engaged in the industry. The herring catch will equal that of last

year, and the schools were as plentiful as ever, but there was a great decline in the price. About half the usual quantity was pickled, but more were smoked than during the previous season.

Pollock and haddock will show a large increase in the catch, owing doubtless to the decreased number of dog-fish in the bay. Other line fish will average about the same catch as 1895. The lobster catch will also equal that of last year.

Overseer Campbell, of St. Andrews, reports "herring were plentiful in my district and in St. Andrew's Bay, sardine herring were never so numerous. In fact, during the past two or three years the whole of my district has swarmed with those fish. Owing to the depressed American market the demand this year has been weak. In Digdeguash, particularly small herring have been very plentiful during the year, and the supply in all parts of my district has far exceeded the demand. On many occasions after the fish were taken from the weirs buyers could not be found, and the owners were compelled to use them as a fertilizer on the land. There was no net herring taken in my district during the year, although there was supposed to be numerous schools in the St. Andrew's Bay during the winter.

"Line fishing has developed into a valuable industry during the past two years, owing to the rapid increase of fish in the bay, where their feed is now so plentiful, and to their ready purchase by a fish company in St. Andrew's.

"There has been no mackerel in my district for some years.

"A large quantity of smelts have been found in the herring weirs, and have been sold for local consumption, bringing about five cents a pound.

"The lobster fishery has been about the same as in 1895, with prices rather better. It is difficult to get correct returns of this fishery, as numbers of the traps are fished by Deer Island men who make their returns to their own officer. Lobsters in the inner bay seem to be getting fewer each year, while their size keeps the same or larger. This I attribute to the winter fishing, when the female lobster is not covered with spawn and cannot so easily be told from the male, and consequently taken when they should not be. This is the opinion of some of the old fishermen, and I heartily coincide with them. I would suggest that lobster fishing be allowed from October 1st or 30th to January 1st, and from March 1st or 15th to June 30th, in this bay.

"A number of Nova Scotia schooners have taken from my district about 1,500 barrels shelled clams.

"With respect to the lobster fishery, there should be a regulation stating how far apart traps should be set, and I would strongly advocate a close season of two or three years for St. Andrews Bay and St. Croix River. This is the only plan, in my opinion, that would be feasible in re-stocking those waters cheaply and quickly.

"Our papers just now are discussing the question of oyster culture here, which was tried a few years since by Mr. Hatton, of Montreal, but his attempt was unsuccessful. The tides have too much rise and fall, and there are no native oysters in the Bay of Fundy. I would again impress on your attention the necessity of a small steam launch in connection with the "Curlew" and to be used partly by the local officers. It would be a great assistance to the local officers and keep matters much straighter than they are at present."

Officer Dick, of Latête and L'Étang District, in his report states that the catch of sardine herring was small, owing to the slow demand when catches were being made by the weirs. Herring, however, were as plentiful as in 1895. The catch of lobsters, he reports, will be about the same as the previous one, and high prices prevailed during the season. Line fishing as good as 1895, with prices lower, and the same number of men employed in it. Considerable illegal fishing for lobsters and herring was attempted, but by energetic measures taken at the beginning, I managed to prevent it and drive the parties away.

Overseer Cross, of Beaver Harbour, in his annual report states there has been a large increase in the catch of cod, hake and pollock. The hake has been in shore and gave the fishermen a better chance. Large herring were scarcer, but small herring have been as plentiful as in former years, but were not all taken from the weirs, on account of the slight demand.

The lobster catch will be about the same as last year, but realized better prices, and more lobsters have been canned this year than last.

The sardine factories here and at Black's Harbour have packed an increased number of cases over preceding years, and fair prices were realized. It is a pleasure to be able to state that the fishermen of my district have made a fairly good season's catch.

Special Guardian Haney, at West Isles, states there has been a slight falling off in the herring pickled during the year, also a large falling off in the quantity of small herring taken for sardine purposes. There has been no herring smoked in this district, there being very little demand. Prices of all kinds of fish have ruled lower than last year except for fresh haddock, which showed an increase in price.

Lobsters show an increased catch over last year, and the returns also show an increase in codfish. The increased codfish catch was due to there being more hands employed at line fishing, owing to the fact that many weir fishermen had to leave the weirs and take up some other branch of fishing. In pollock there has been a very large increase in the catch, owing to the fact of more people being engaged in this fishery, and an enormous increase in the schools of fish. Very few smelts were caught this season, because of the presence of pollock and silver hake along shore.

Overseer Martin, of Grand Manan, in his annual report states: "I am grateful to be able to report an increase in all branches of the fisheries. The catch of cod show an increase of a thousand quintals; pollock, fifteen hundred quintals, and hake, fifteen hundred quintals. The catch of haddock shows about the same as last season. The herring catch exceeds any previous year, there having been taken about 12,500,000 lbs. The catch of lobsters also increased about 100 tons, owing to a greater number of traps having been employed than last year. The increase of the trap was caused by a cannery having been established at Grand Harbour and to keen competition by foreign buyers. The prices for lobsters realized by our fishermen were almost fabulous, and therefore one of the best seasons in this line were realized.

"The increase in the catch of cod I cannot attribute to any particular cause, but the increase in the hake catch I attribute not only to better feed in the bay, but also to the scarcity of dog-fish, giving the trawls a better chance to fish. As there was no increase in men or plant, I know of no better cause.

"The increase in the pollock catch, I think, is entirely due to the large schools of herrings which inhabited the bay, and with reference to the latter, I firmly believe they were chased and driven inshore by the former. The principal part of fish of all kinds marketed so far, have gone to markets other than the United States, large quantities have been sold in Canada, and nearly all that have gone to the United States, have gone in bond for export from there.

"Quite an agitation is in progress here among herring curers to determine upon a method of preventing such an enormous quantity of fresh herring going to the United States, there to be cured. This practice takes labour from our people and fills the market with raw material, which we should have for the cured product, or rather, helps the American to supply the southern markets, in competition against us.

"Not a single violation of the spawning ground regulations has come under my notice. There have been several cases of the throwing of fish offal outside of the proper grounds, all of which I have reported to you. There are also complaints relative to netters leaving their gear, &c., in the waters during the day time. This practice is injurious to the fisheries, and in my opinion should be prevented."

Overseer W. B. McLaughlin, in charge of the spawning grounds at Southern Head, Grand Manan, in his annual report states, that the herring fisheries at South Grand Manan have arrived at the normal condition they were in at the beginning of the present century, and all this he attributes to the thorough protection of the spawning grounds. He says: "At the beginning of this century, herring were so plentiful at Grand Harbour that the pollock drove them ashore in such quantities, and their decay on the beach contaminated the air for weeks. At that time vessels from all parts of the Bay of Fundy and the New England States gathered at Grand Manan

for herring, and an inordinate greed, with slovenly and wasteful habits of fishing, soon drove the herring from Grand Harbour and vicinity, and Seal Cove became the resort of the fishing fleet, which, in those early days, numbered several hundred sail. The grounds were so overfished that in the early thirties the gradual failure of the herring fishery began, and the government of New Brunswick, for the preservation of the spawning grounds, passed an act limiting each vessel and boat to a few fathoms of net, the use of which would make it impossible for vessels to overfish the grounds. But unfortunately, boats were allowed the same quantity of nets that vessels were allowed, and numbers of men would unite, hire a vessel, and attach a small fleet of boats, thereby violating the intention of the law. This led to seizures and litigation, and in many cases to mob fights between the officers and fishermen, till finally the act was repealed, and the spawning grounds were left to the mercy of selfish men, who gathered on these grounds in great numbers, and so destructive was their work to the grounds that in the late forties, herring were slowly but surely disappearing from the waters of Charlotte County. In 1848 and 1849, the fishing fleet did not average five barrels to a vessel during the season, and the britt or sardine herring had entirely disappeared from these waters. About the year 1850 I drew up a petition to the government of New Brunswick, asking for an annual close time at the spawning grounds at the Southern Head of Grand Manan, to which I got several hundred signatures. This petition, with the report of Mr. Perley in 1852, brought the close time of three months in each year into force, which is from the 15th day of July to 15th day of October. As fishing vessels resorted to Grand Manan from Bay of Fundy and New England ports, considerable trouble was found in enforcing the law.

"An officer and 4 men from a ship of the Royal Navy in Halifax, assisted in protecting the grounds till 1854, when the war with Russia caused the withdrawal of this assistance. The New Brunswick government also became indifferent, and the grounds were left to themselves till about 1862, when Messrs. Stevens and Helms, with a sail boat, arrived to protect the grounds. Those men were much surprised at the reception accorded them. Poachers fired at them, one of their boats was burned, and another taken off and sunk in deep water. They seized much property, imposed many fines on evil-doers, but nothing seemed to discourage the poachers, and they carried on their illegal work up to the time of confederation. I was then given control with a boat's crew, and found the spawning ground limits badly defined, and extended off shore only one mile. This allowed vessels on dark nights to slip over the line and poach. With considerable difficulty I got the limits defined and extended off shore three miles. After seizing, confiscating and destroying considerable property, the poachers gave up their business, and the increase of herring in these waters since then is simply marvellous. The waters of Three Islands, Long Pond Bay and Grand Harbour have become well stocked with herring again, and the cod and pollock have returned to their old haunts. Herring fishermen are now able to procure all the herring they want, without disturbing the Southern Head spawning grounds. This fact makes protecting the Southern Head grounds easy, also the presence of the cruiser "Curlew," which often passes over the grounds, and is always within easy call of the local officer. The local officer living on the grounds simplifies the protection very much and knows a poacher at sight. These spawning grounds are now in excellent condition, and one of the finest breeding places on the coast of North America. I would suggest that lobster fishing be allowed on these grounds, only from March 1st to June 1st, as I am well satisfied that lobster fishing taints the waters and keeps the herring off shore. March, April and May are months that herring rarely visit the inshore grounds, and therefore are the proper months for lobster fishing on these grounds."

Guardian Conrad, the officer in charge of the border lakes from St. Croix, N.B., running northwards, states in his report that an increase is quite noticeable in the fish frequenting the lakes and streams of his district. An increased number of sportsmen visit the waters, and are well pleased at the sport obtained. The men

who formerly poached there are still in the vicinity ready to engage in the business again at the first opportunity. Very few attempts were made at poaching this season, and those only by the residents of the United States side of the border.

His business of lumbering and farming compels my constant cruising on the lakes inland in my steam launch and thereby compelling a strict observance of the law.

I have the honour to be, sir,

Your obedient servant,

JOHN H. PRATT,

Inspector of Fisheries.

DISTRICT No 2.

REPORT ON THE FISHERIES OF DISTRICT No. 2, COMPRISING THE COUNTIES OF RESTIGOUCHE, GLOUCESTER, NORTHUMBERLAND, KENT, WESTMORLAND AND ALBERT, FOR THE YEAR 1896, BY INSPECTOR R. A. CHAPMAN.

MONCTON, 2nd January, 1897.

Honourable L. H. DAVIES,
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit my report on the fisheries of District No. 2, comprising the counties of Restigouche, Gloucester, Northumberland, Kent, Westmorland and Albert, in the province of New Brunswick, for 1896, with extracts from the reports of the local fishery officers, though many of them are not very full or explicit, also tabulated statements giving the product and value by districts and counties, together with a return of the capital employed in the prosecution of the fisheries. The returns show an increase in the aggregation over last year of \$224,984, exceeding somewhat the estimate in my preliminary report; the gross values of fish taken for past seven years while I have had charge of this district are:

For 1890.. .. .	\$1,445,194 82
" 1891.....	2,075,392 47
" 1892....	2,147,782 60
" 1893.....	2,792,269 20
" 1894.....	2,940,185 00
" 1895.....	3,175,008 50
" 1896.....	3,399,992 50

The quantities of the four largest yielding kinds of fish for the first and last of these years are:—

	1890.	1896.
Salmon, lbs.....	1,016,197	2,360,735
Herring, brls	57,110	220,405
Cod, cwt.....	57,400	99,050
Smelt, lbs.....	3,778,952	8,298,790

Mackerel fresh in ice have also increased from 45,520 lbs. in 1890, to 698,975 lbs. in 1896, and this while the catch in other parts of the maritime provinces has remained nearly stationary, yet there is not the least doubt that the fisheries of the gulf counties are capable of expansion in many ways without at all endangering the supply if proper care and protection are given during the several spawning seasons. I will now briefly remark upon the principal kinds of fish caught.

SALMON.

The increase this year was largest in the rivers and estuaries, yet all the streams were full of salmon and grilse, on their way to the spawning grounds, last fall, which points to the continuance of improvement, which has been so marked for past few years.

HERRING

Were exceedingly abundant last spring all along our coasts, and the nets were so loaded with them in many places that they could not be taken care of; nearly every season large quantities of spawn are driven ashore at several points amounting in the aggregate to hundreds of tons which are carted ashore for manure.

MACKEREL.

The quantity taken and shipped in ice exceeds that of last year, while very few are now salted; in many parts of the gulf these fish were plentiful but would not take bait, those caught were of fine size and quality.

LOBSTERS.

There is quite a large falling off in the pack this year which is certainly caused by overfishing, the high prices obtained keep many at work that would otherwise abandon this business.

COD.

A better class of vessels and boats are producing an increase in the catch of this staple fish, and yet this fishery is capable of great expansion.

SMELTS

Show a very considerable increase over last year's enormous catch, and this fall the streams are full of them, showing that the large quantities taken and sold are not diminishing the supply, in fact this can only be a small percentage of what is consumed by other fish for food.

BASS.

The catch is slightly inferior to that of 1895, owing to this fish not having struck in until the time allowed for fishing in September on the Miramichi had nearly expired.

ALEWIVES

Were very plentiful on their usual grounds and taken in large quantities.

OYSTERS.

Less were raked in Bay du Vin than the year before, principally owing to rough weather; at Buctouche and Cocagne where the best oysters are found more were taken than during the previous season.

SHAD.

That fine fish not being protected during its spawning season is becoming scarcer each year in the Bay of Fundy. The only possible way to restore this fishery to what it was years ago, when some two or three hundred large boats were profitably engaged in it, is to allow no fishing anywhere until after the 20th June, by which time they will have ascended the rivers and spawned. My predecessor, Mr. Venning, reported on this, and I have each year and at the several conferences at Ottawa pressed the importance of this matter, but while the facts I state were undisputed, nothing has ever been done to remedy the evil.

SYNOPSIS OF FISHERY OVERSEERS' REPORTS.

RESTIGOUCHE COUNTY.

Overseer Verge reported a very large increase in the catch of salmon which is the principal fish in that district.

Overseer McLean says salmon fishing on the whole was never better, the catch being about 70 per cent better than last year. Herring very plentiful; regulations were observed.

GLOUCESTER COUNTY.

Overseer Sweeney reports an increase in salmon and not much difference in other kinds of fish.

Overseer Jas. D. Theriault reports salmon largely in excess of last year; lobster pack considerably less and fish small, due to over fishing.

Overseer Xavier D. Albert reports a phenomenal increase in catch of salmon at Caraquet Island; other fishing generally good.

Overseer Arcade Landry says fishing generally is a little better than last year.

Overseer Adolphe Aché reports fishing generally fair; lobster fishing overdone.

Overseer Olivier Robichaud reports a very large increase in his district of nearly all kinds of fish, especially in herring, cod and gaspereau.

NORTHUMBERLAND COUNTY.

Overseer Ferdinand Robichaud says a much larger quantity of salmon and smelts were taken. Bass arrived too late for September fishing, consequently very few were caught.

Overseer Williston reports a largely increased catch of salmon and smelts, but less of lobsters and also of oysters, owing largely to rough weather. He says the streams were full of salmon this fall and that the smelts that leave such an immense amount of dollars among all classes have put in a royal appearance again this winter. They were large and fat and brought good prices. He also reports regulations well observed.

Overseer Abbott reports nearly double the catch of salmon in 1896 over 1895, also a very large catch of smelts and frost fish.

Overseers Hogan and Boyce both report an increase in the catch of salmon, and that the north-west and south-west branches of the Miramichi River and their tributaries (the great building grounds of these fish) were full of salmon and grilse last fall.

KENT COUNTY.

The overseers report a decrease in pack of lobsters, except at Cocagne, where more fishing was done; a larger catch of mackerel of very fine size and quality; herring and gaspereaux abundant; smelts a little in advance of last year, and a larger quantity of oysters of fine quality.

WESTMORLAND COUNTY.

Overseers report about 100,000 cans less lobsters packed than last year, herring exceedingly plentiful, and smelts in the aggregate better than in 1895.

ALBERT COUNTY.

The fisheries of this county since the failure of the shad alluded to elsewhere are not important.

I have the honour to be, sir,

Your obedient servant,

R. A. CHAPMAN,
Inspector of Fisheries.

DISTRICT No. 3.

REPORT OF THE FISHERIES OF DISTRICT No. 3, OF NEW BRUNSWICK, COMPRISING THE COUNTIES OF VICTORIA, CARLETON, YORK, SUNBURY, QUEEN'S, KING'S AND ST. JOHN, FOR THE YEAR 1896, BY INSPECTOR H. S. MILES.

OROMOCTO, SUNBURY Co., 2nd January, 1897.

The Honourable L. H. DAVIES,
Minister of Marine and Fisheries.
Ottawa.

SIR,—I have the honour to submit my fourth annual report on the fisheries of District No. 3, comprising the counties of St. John River, in the province of New Brunswick, with extracts from reports by overseers and wardens, also tabulated statements giving the product and value of the fishery industry, and the number of men and amount of capital employed. The returns show an increase in nearly all kinds of fish for which no special cause can be assigned. The figures are:—

1895.....	\$259,946 25
1896	290,739 20
Increase in 1896.....	\$ 30,792 95

SALMON.

There was an increase of 50 per cent in the catch of this fish in St. John Co., the average weight being about fourteen pounds per fish. For twenty years there have not been so many taken in a single year. Grilse, weighing from four to six pounds, were also often seen, which no doubt was the result of the placing of the fry in the rivers.

LOBSTERS

Show a considerable increase. They were fished during the winter in the deep water off shore by men and vessels that had formerly been engaged in the herring fishery. More than half the catch was shipped to the United States, where remunerative prices were obtained.

ALEWIVES.

In the spring an unusually large supply of these fish were taken for food and bait. The Nova Scotia fishermen are quite dependent on the supply obtained in St. John for this purpose. For fishing with trawls in the Bay of Fundy and on the eastern and southern sides of Nova Scotia, not less than 3,000 barrels were shipped fresh to Halifax, Yarmouth, Digby, &c. All the salted alewives were shipped to Boston and other American cities.

SHAD

Are being overfished, and unless immediate action is taken to protect them for a few years there is imminent danger of their almost complete destruction. No fish sells more readily for cash than shad, and during the entire season not only are they overfished in the various rivers, but in St. John harbour, the nets are long and deep, and so thickly set as to render the passage of many into the rivers exceedingly difficult.

TROUT.

The quantity of trout caught is exceedingly difficult to estimate. There is a great abundance of them in the lakes and brooks, and the strict enforcement of the law prevents them being overfished.

HAKE, COD AND HADDOCK.

The catch of these fish was somewhat better than usual, owing to more men being engaged in fishing them. As a result of the low wages offered by coasting vessels, many stayed at home and fished.

HERRING

Were not less abundant than other years, but owing to the fact that in the early season prices were low not many prepared to fish for them, so there were fewer taken and better prices prevailed than was expected.

SARDINES

Were very plentiful, but the demand for them was limited, and the greater part of the catch was sold and packed for bait to be used for lobster fishing this winter.

SYNOPSIS OF FISHERY OFFICERS' REPORTS.

ST. JOHN COUNTY.

Overseer O'Brien reports a very successful year's work. Salmon fishing was better than for years—herring were abundant both spring and fall. A considerable quantity of lobsters were taken in the winter and netted, the fishermen getting better prices than usual. The demand for this fish in Boston cannot be supplied. From Beaver Harbour to the head of the Bay of Fundy was throughout the whole season literally fenced with traps, and consequently lobsters were greatly overfished, as shown in the diminution in size and weight of the individual fish in localities which have been fished continuously for several years. The catch of cod is much above the average. Halibut found a ready market at home or was shipped fresh in ice. The catch of pollock and hake was about an average with other years. There were plenty of them, but as this fishery is more difficult and the prices less than those received for other fish, few engaged in the business. Trout are still plentiful in our lakes and streams, and as none are exported no great danger of exhaustion exists, but every year increases the number of sportsmen intent on their capture.

KING'S COUNTY.

Overseer W. H. Heine says: Alewives, the first fish to make their appearance in the spring, were this season late in coming and very scarce. Some sections in which large quantities have been caught were not visited by them at all. No reason for their non-appearance is apparent. The shad fishery which comes on during the latter part of May was vigorously prosecuted, and consequently the catch was larger than for years before. This was especially so on the upper waters of the Kennebecasis, which has to be constantly patrolled to enforce the weekly close time. The catch of pickerel is becoming more important each year, and this industry is developing into a remunerative business for a considerable number of persons. These fish are all shipped fresh in ice to the New York and Boston markets where they command good prices. Salmon of late years have been scarce, but on account of the ten thousand fry which by order of the department were placed in these waters, grilse were frequently seen, and in a few years the Kennebecasis with its rapids and shady pools will be an excellent stream for sportsmen.

The close seasons were fairly well observed. Four nets were seized and sold, the ownership could not be proven, so no prosecutions resulted. All the mills on the Kennebecasis, except Waddel's mill, at Reed's Point, are burning or otherwise taking care of their saw-dust and mill rubbish. Considerable difficulty is experienced in getting fishermen to give a complete and accurate account of their catch, some giving less than a fifth of the amount known to have been taken by them.

Overseer W. L. Belyea, Browns Flats, King's County, says: In the waters of the St. John River, flowing through the parishes of Kingston, Greenwich and Westfield, the amount of fish caught is about the same as last year, except a slight increase in the catch of sturgeon, owing to the open season commencing two weeks earlier than the previous year. About 50 per cent of the fish caught in this district have been exported, 40 per cent sold in Canada, and 10 per cent used for home consumption. No abuses exist to his knowledge. The several close seasons have been well observed, no violations came under his notice. The Saw-dust Act has been fairly well observed by the mill owners. No fish-ways in his district.

Overseer J. H. Gray, Springfield, King's County, says bass fishing has not been so remunerative as in years past, very few have been taken, and the fishing material largely reduced, yet the fishermen are determined to keep a vigilant eye over the industry, and will be prepared to take advantage of its benefits when the opportunity offers. The fish taken were exported to the United States. Shad fishing is carried on upon a limited scale in a general way, the nets used for salmon are brought into requisition for this purpose. Alewives were plentiful, but the catch reported is about the same as last year; two-thirds of them consumed at home, and the balance sold in St. John for exportation. Eels are very destructive and annoying to the fishermen; a bounty for capturing eels might have beneficial results. Pickerel seem to be on the increase, about double the amount being caught this year to that of last, and are exported to the States. He does not know of any abuses existing except the saw-dust from a few small mills. Close seasons have been observed by the fishermen. He has kept vigilant watch and patrolled the district each month for the purpose of enforcing the law. No illegal fishing has come to his notice. There are no fish-ways in his district.

Overseer J. W. Nowlan, Smiths Creek, King's County, says everything in his district pertaining to the fisheries is legally done, and that trout are plentiful and that the close seasons have been well observed. No fish-ways in his district.

Overseer A. C. Warden, Johnston, Queen's County, says about the same number of men were engaged and the same amount of fishing gear used as last year, but there was a slight decrease in the catch of alewives compared with last year, the prices being so low caused a less effort put forth to catch them. There was a slight increase in the catch of shad, caused, no doubt, by the favourable winds at the mouth of the Washademoak, and an increase in the catch of pickerel caused by more winter fishing being carried on. About 80 per cent of the fish caught were sold in the St. John market, and the balance used at home. The several close seasons have been strictly observed. No illegal fishing came to his knowledge. The Saw-dust Act was not observed. No fish-ways in his district.

Overseer M. Case, Wickham, Queen's County, says the catch of shad and salmon for this year is about the same as last, and a decrease in the catch of alewives; the catch of pickerel increased largely within the last year owing to the high prices obtained for this fish in the American markets. Eels are over abundant and a great nuisance to the salmon fishermen, but not many of them were taken on account of the absence of the men who formerly engaged in this fishery. All the fish caught in this district were used for home consumption or sold in St. John, except pickerel, which were exported to the United States. The close seasons were well observed. Saw-dust was allowed to escape in the rivers.

SUNBURY COUNTY (NOTE BY INSPECTOR.)

Geo. W. Hoben, formerly overseer for Sunbury, died in July. He was one of the oldest fishery officers in New Brunswick, having held the office, so he has informed me, for 24 years. After his death I gave his district my personal supervision.

Salmon, shad and alewives were abundant; pickerel fishing is growing to be quite an industry. They are shipped to Boston, very few being used for food in this county. No abuses existed, and the close seasons well observed. The fish-way, in Smith's dam, on North Oromocto River is useless. No fish will enter it. I caught and placed in it with a dip-net last spring eleven strong active alewives, and put it up so that they could only escape by going through it, turned the water on and waited twenty minutes, expecting the fish in that time to pass up and escape into the river above. I shut the water off and went down into the compartments, travelling towards the entrance. I found no fish until I arrived at the last compartment, the same one I placed the fish in. I found them all dead, seven of them were mangled so that their entrails protruded, the other four dead but not torn. I am of the opinion that no twenty salmon could live to go through it. It may be a good fish-pass in some rivers, but in the North Oromocto River it is a complete failure.

Overseer Robt. Orr, York County, says: "During the year I devoted all my time to watching the rivers and lakes within my district. As a whole I did not observe much illegal fishing. There was some drifting done on the River St. John in tidal water, but early in the season Mr. E. H. Allen, of this city, interested himself so much in the matter that you thought well to place a special guardian on this water, and as a consequence no more illegal work was brought to my notice there. The South-west Miramichi being the principal salmon stream in my district, I devoted all my spare time there. Owing to the riparian or club owners withdrawing their men from the river, I had to exercise special diligence in preventingspearing, which is the most common form of poaching on this river. In the early spring I was notified by Mr. T. G. Loggie, the manager for the club owners, that owing to the bad guarding of the river below Boiestown, he would not place any men on the river.* For the last two years the river for 65 miles below Boiestown to tide water has been completely choked with nets, and very few fish were allowed to ascend into my district. It was through this reason alone that the anglers lost heart and abandoned the work. This season the river over this 65 miles was choked with nets as usual, and large quantities of salmon were barrelled up for winter consumption. During the open season scarcely any large salmon were observed on the upper part of the river, but as the nets were cleared away large numbers of salmon were allowed to ascend. If the fishery laws could be amended so that the settlers on this river could have three days fishing in the week, and allow the fish to ascend the other three, it would be a tremendous boon. It would satisfy the anglers, fairly satisfy the settlers, and the increased number of fish allowed to get on the spawning beds in my district would be the means of replenishing the fisheries at the mouth of the Miramichi. As mentioned above, owing to the few men in the government employ to guard the river, there was some spearing carried on. We found and seized eight sets of spearing apparatus, but no one could be found to say that they were the owners, and they are still in my possession. There should be at least six men on this stretch (51 miles long) keeping it clean. On the whole there was no increase of salmon and shad in my district, and pickerel were very plentiful, and perch, trout and gaspereau fair."

T. G. Loggie, Secretary of the S. W. Miramichi Angling Club, reports as follows:—

"During the past season the anglers, as my correspondence to your department will show, placed no guardians on the river to act in concert with those employed by your department. Our reasons for not so doing were explained at the time, and our action was fully borne out by the wholesale destruction of the river below that part over which Inspector Miles holds jurisdiction. Looking at the matter in a calm, unprejudiced manner, one is forced to the conclusion that in a very short time, yea, in a very few years, salmon angling on the S. W. Miramichi will be a thing of the past. A glance at the diaries of the guardians as well as the reports of the

* This 65 miles of river spoken of below Boiestown is in Northumberland county, consequently comes under R. A. Chapman's control.—H. S. MILES.

overseer and the inspector himself, will show you that during the months of June, July and August of this year, scarcely a full grown salmon could be seen over the whole district from Boiestown to the Forks, a distance of 50 miles. Over the entire distance are innumerable pools tempered by the cold waters from the many streams that flow and mingle with the waters of the Miramichi, forming resting places for the salmon that ascend to spawn. As matters are now, it is next to an impossibility for a salmon to escape the barriers that are placed on the river below Boiestown to seek his capture. After escaping the net work of fisheries in the Miramichi Bay and river he ascends into non-tidal water, where the river narrows in many places so that nets can be strung from bank to bank, and has to run the gauntlet of nets, so set, for 65 miles more, until he reaches Boiestown. If he ever reaches there, he is scarred, torn and battered. The record of the past season over this 65 mile stretch has been most disastrous. In some instances, I am told, smaller mesh nets were set above the ones of large mesh to capture the grilse passing through. The result is not surprising. I will give you one instance, the sale of 100 grilse in this city by a settler on this stretch, the result of one night's fishing.

"The anglers do not claim that the settlers should be debarred from a moderate use of their fronts. The late law prohibiting net fishing for salmon in non-tidal waters sought to wipe out the riparian rights enjoyed for over a century, and the result was that the settler redoubled his energies to evade the law. What is required is a law establishing the settlers' rights and make regulations whereby these valuable fisheries may be restored and protected. Let the nets be removed three days and three nights in the week, to allow the fish to ascend, and have guardians and efficient overseers appointed or continued to carry this out. Prolong the close season to the 20th June, to allow the first run to get up. Then the anglers would again take up the protection and the river would be restored to its once famous state."

Wm. Blake, Esq., special fishery statistician for Carleton county, reports a total disregard of all fishery laws and regulations on the St. John River, Maduxnakeag and Miramichi Rivers, flowing through that county. Not only had net fishing been carried on in those non-tidal waters, but dynamite as well had been used. For several years the poachers have had it all their own way owing to there having been no fishery officers in the county, where not less than four are required throughout the greater portion of the fishing season. Of the catch it was impossible to get anything like a correct account, as no doubt three-fourths of the fish taken were illegally caught. The fish-way which was lately built on the Maduxnakeag River at Woodstock is considered a success. It is looked after by William McDonald. The inhabitants living along the St. John River complained bitterly about the saw-dust in the river. In the village of Hartland he was told that it was impossible to get a bucket full of water from the river which did not contain saw-dust, whereby the fisheries were undoubtedly injured to a very considerable extent.

Overseer T. D. Ryan, Victoria County, says there has been no increase in the catch of fish in his district this season, but rather a decrease, not on account of the scarcity of fish, but rather from a less vigorous prosecution of the fisheries. He must ascribe this to the hard times in this locality during the fishing season this year. All fish caught in this district are used for home consumption. There are abuses existing in his district, and the only means to prevent them that he can suggest is by special guardians. The close seasons have been well observed. Two or three cases of illegal fishing came to his knowledge, but some time after it happened, and he could not in any case find the names of the parties. The Saw-dust Act is not observed in his district, nor does he consider that there is any injury done to the fisheries by the saw-dust.

Overseer Joseph Martin, Baker Lake, Victoria County, says that trout, &c., were abundant in the rivers and lakes, that some illegal fishing was carried on. He seized a canoe and spearing outfit, and got the names of violators. The case is now in the hands of the inspector, which will be prosecuted later on. The close seasons are well observed. No fish-ways in his district.

GENERAL REMARKS.

SUNBURY COUNTY.

Before closing my report, I cannot too strongly urge upon the department the great advantage (to the general fisheries of St. John, King's, Queen's, Sunbury and York) that would result from the removal of the dams across the Oromocto River at Hartt's and Tracy's mills, which effectually debars fish of all kinds from one of the best spawning beds in the province, viz., North Oromocto Lake, which each year salmon, shad and alewives vainly try to reach, and in the end are forced to return to the low lying meadows along the river bank, where alewives deposit their spawn, where in a few hours the receding freshet has left them to dry up and blow away. Two fish-ways were built on this river, one at Hartt's mills and one at Tracy's mills, but neither of them was sufficient for the requirements. Two years ago the freshet removed the Tracy fish-way, mill and part of the dam, and there remains now only the obstruction at Hartt's mills to be overcome.

The lobster fishery in St. John County is a source of great wealth to the deep sea fishermen, who threaten this industry with speedy extinction, and some protective measure should be at once adopted. Shad also are overfished to an alarming extent, and unless the catch of them is prohibited for a few years on some good spawning grounds—say Darling's Lake, or other suitable place, there will soon be none to catch. Their scarcity has resulted in excessive fishing in the past, and now when the supply is failing, this fishing is redoubled with renewed energy, which threatens their hasty extinction.

I am, sir, your obedient servant,

H. S. MILES.

NEW BRUNSWICK—DISTRICT NO. 1.

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries; Quantity and Value of Fishing Material; Kinds and Quantities of Fish, and the Total Number of Men employed, &c., in District No. 1. Province of New Brunswick, for the Year 1896.

Number.	Districts.	FISHING VESSELS AND BOATS.						FISHING MATERIAL.						KINDS OF FISH.										Number.			
		Vessels.			Boats.			Nets.		Weirs.		Smelt Nets.		Lobster Traps.		Sardines, in cans, $\frac{1}{2}$ lbs.	Salmon, fresh, in ice, lbs.	Scallops, in cans, lbs.	Clams, shelled, lbs.	Seal skins, number.	Herrings, pickled, brls.	Herrings, frozen or fresh, lbs.	Herrings, smoked, in boxes, lbs.		Alewives, brls.	Cod, cwt.	
		Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Value.	Fathoms.	Value.	Number.	Value.	Number.	Value.												
<i>Charlotte County.</i>																											
1	Leopreux to Letang.	10	204	4550	63	118	1945	154	4950	2475	30	5700	3400	2511	95500	10000	21500	4	570	255	80000	12562000	9343000	2000	1397	750	1
2	Letang to St. George.	7	99	1600	30	201	6729	173	1073	358	64	12975	5	30	2188	880										2	
3	St. George to St. Stephen.	1	10	300	2	72	2150	75			32	8500			466	415	110000	2300			80000	12562000	9343000	2000	1000	3	
4	St. George (inland).																									4	
5	St. Stephen.	17	323	8900	83	267	53250	478	12500	3500	45	42400	11100	14100		350									230	4300	5
6	Grand Manan.	10	231	7400	50	105	4800	148	1204	350	22	8800	8	80	758	519									4390	5	
7	Campobello.	8	143	3000	26	282	10048	260	3697	745	74	19225	40	317	2229	1008	200000	4000			1760				802	7	
8	West Isles.																								634	8	
Totals.		53	1010	25750	254	1045	80322	1288	23424	7428	267	97000	53	427	23141	19290	405500	10000	27800	4	10149	12643760	9767400	250	9273		

Return showing the Quantity and Value of Fish, &c.—New Brunswick—*Con.*

DISTRICTS.	KINDS OF FISH.													FISH PRODUCTS.						TOTAL VALUE.	Number.					
	Pollock, cwt.	Hake, cwt.	Hake, sounds, lbs.	Haddock, cwt.	Halibut, lbs.	Finnan Haddies, lbs.	Clams, unshelled, brls.	Trout, lbs.	Frost fish.	Squid, brls.	Flounders, lbs.	Smelts, lbs.	Pickarel, lbs.	Clams, canned, lbs.	Sardines, brls.	Scallops, brls.	Lobsters, tons.	Lobsters, cans.	Fish Oils, galls.			Coarse and mixed fish, brls.	Fish Guano, tons.	Fish used as bait, brls.	Fish used as manure, brls.	
<i>Charlotte County.</i>																										
1 Lepreaux to Letang...	480	5387	5387	910	25000		2074			10 4400				24000	3000		361	24432	5970	20	90	450	270		86,850 48	1
2 Letang to St. George...	3357	1406	1175	1194	8000		189			167 229	3500				40450	100	74		4200			966	300		116,602 28	2
3 St. George to St. Stephen...	1000			2000		195000					2000	2700			28345		14		1230		45	44	3025		104,239 00	3
4 St. George (inland)...								6000																	600 00	4
5 St. Stephen...	5020	3500	4000	450	81000			3000	1500			3500	2500												1,745 00	5
6 Grand Manan...	7000	5500	4600	9700	35400				1000	500					3120		384	60000	15330			1450	1800		578,023 50	6
7 Campobello...	26254	30	30	1145	210					181					7564		18	30000	5120				395	20	99,743 00	7
8 West Isles...										77 500	1573						137		3707	32		1744	147		120,898 50	8
Totals...	45511	15823	15192	15399	149640	195000	2583	13250	2500	935 7729	11273	2500	24000	82479	100	938	114432	35557		52	135	5049	5562		1,108,701 76	

RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 1, New Brunswick, for the Year 1896.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Salmon, fresh, in ice.....	Lbs. 350	0	20		70 00
Sardines, do.....	Brls. 82,479	2	00	164,958	00
do in oil.....	Cans. 405,500	0	05	20,275	00
Scallops, fresh.....	Brls. 100	2	50	250	00
do canned.....	Cans. 10,000	0	15	1,500	00
Clams, unshelled.....	Brls. 2,583	1	25	3,228	75
do shelled.....	Lbs. 27,800	0	10	2,780	00
do canned.....	Cans. 24,000	0	10	2,400	00
Herring, pickled.....	Brls. 10,149	4	50	45,670	50
do frozen or fresh.....	Lbs. 12,643,760	0	02	252,875	20
do smoked.....	" 9,767,430	0	02	195,348	00
Cod, dried.....	Cwt. 9,273	4	50	41,728	50
Alewives, pickled.....	Brls. 250	4	00	1,000	00
Seal skins.....	No. 4	3	00	12	00
Pollock, dried.....	Cwt. 45,511	2	50	113,777	50
Hake, do.....	" 15,823	2	50	39,557	50
do sounds.....	Lbs. 15,192	0	50	7,596	00
Haddock, dried.....	Cwt. 15,399	3	50	53,896	50
Finnan haddies, smoked.....	Lbs. 195,000	0	10	19,500	00
Halibut, fresh.....	" 149,640	0	10	14,964	00
Lobster, fresh.....	Tons. 938	80	00	75,040	00
do canned.....	Cans. 114,432	0	14	16,020	48
Trout, fresh.....	Lbs. 13,250	0	10	1,325	00
Tom cod or fresh fish.....	" 2,500	0	05	125	00
Squid.....	Brls. 935	4	00	3,740	00
Flounders.....	Lbs. 7,729	0	07	541	03
Smelt.....	" 11,273	0	05	563	65
Pickarel.....	" 2,500	0	05	125	00
Fish oil.....	Galls. 35,557	0	45	16,000	65
do guano.....	" 135	25	00	3,375	00
do used as bait.....	Brls. 5,049	1	50	7,573	50
do used as manure.....	" 5,562	0	50	2,781	00
Coarse and mixed fish.....	" 52	2	00	104	00
Total value of catch for 1896.....				1,108,701	76
do do 1895.....				968,203	50
Increase during 1896.....				140,498	26

**NUMBER and Value of Vessels, Boats, Nets, Weirs, &c., engaged in the Fisheries of
District No. 1, New Brunswick, for the Year 1896.**

Materials.	Value.	
	\$	cts.
53 vessels (tonnage 1,010).....	25,750	00
1,045 boats.....	80,922	00
23,424 fathoms of gill-nets.....	7,428	00
269 seines for weirs (fathoms, 7,300).....	14,919	00
267 weirs.....	97,600	00
53 smelt nets.....	427	00
914 trawls.....	7,000	00
3,000 hand-lines.....	3,000	00
500 dip-nets.....	2,500	00
23,141 lobster traps.....	19,290	00
7 lobster canneries.....	14,200	00
30 fish-presses.....	3,000	00
9 ice houses.....	16,750	00
750 smoke and fishhouses.....	157,144	00
231 piers and wharfs.....	50,155	00
12 sailing and steam smacks.....	5,950	00
2 sardine canneries.....	3,000	00
1 fish-curing factory.....	3,500	00
1 do guano do.....	5,000	00
80 weir-scows.....	4,000	00
50 pile-drivers.....	500	00
Total value of material.....	522,035	00

DISTRICT No. 2.

the Fisheries, Quantity and Value of Fishing Material, Kinds and Quantities of No. 2, Province of **New Brunswick**, for the Year 1896.

FISHING MATERIALS.						KINDS OF FISH.												
Smelt-Nets.		Bass-Nets.		Trawls.		Salmon, fresh, in ice, lbs.	Salmon, pre- served, in cans, lbs.	Herring, salted, brls.	Herring, fresh or frozen.	Herring, smoked, lbs.	Mackerel, salted, brls.	Mack'el, fresh or preserved, in cans, lbs.	Lobsters, pre- served, in cans, lbs.	Lobsters, alive or fresh, tons.	Cod, dried, cwt.	Number.		
Number.	Value.	Number.	Value.	Number.	Value.													
200	12000					118000										1		
20	1000					208400		2000	30000			4000	32500	1 ⁵ / ₈	40	2		
220	13900					326400		2000	30000			4000	32500	6 ³ / ₈	40			
						65280		9000	600			480	4550	47 ¹ / ₂	180			
						142500		20500	50000			10	2000	46800	3	2070		
25	1200			15	200	991595	3560	37075			137	47925	137975	5	23990	1		
7	350			18	180	59820		2400			170	9500	58200	3	3700	2		
25	650			10	100			1500			60				3600	3		
10	350			100	2000	14000	1000	24000		30000	400	1500	97000	4	29800	4		
34	1150			50	500			2650		13200	134	9800	67550	3	7160	5		
14	450			16	320			4150				12000	196050	4	10600	6		
20	600			20	290		6000	9000			25	1000	280000	3	1500	7		
85	2975			15	150	40000		2350	25000		50	20250	21400	2	750	8		
72	2170			12	120	36000		21000			10	1500	39200	2	13000	9		
292	9895			256	3860	1283915	10560	124625	75000	43200	996	105475	944175	29	96170	10		
						256783	1584	560812	1500	864	13944	12657	132184	2175	432765			
163	6460			10	150	174000	500	3000		20000		1000	61500	2	500	1		
184	7360			15	250	206610		3000		40000		70000	105000	4	100	2		
306	15000	100	500			166100		200	1000			1000			50	3		
		200	1000			75000										4		
		50	250			65000										5		
653	28820	350	1750	25	400	686710	500	6200	1000	60000		72000	166500	6	650			
						137342	75	27900	20	1200		8640	23310	450	2925			
						500												
69	2500			10	150	18000		1320			10	200000	85440	2	160	1		
90	2700			6	100			7000		10000	100	16000	30000	3	300	2		
305	12200			2	80	18500		11500		20000	75	280000	158000	5	580	3		
218	7630							6000	50000	10000	40	9000	145000	4	100	4		
104	2200							7200		5000	30		52160	2	800	5		
786	27230			18	330	37000		33020	50000	45000	255	505000	470600	16	1940	6		
						7400		148590	1000	900	3570	60600	65884	1200	8730			
175	8000					5000		28000	15000	40000	100	5000	234000	50	100	1		
78	2200							24000	10000	10000	75	5000	393600	10		2		
27	650			4	30	6000		2500	40000	30000		2500		10	100	3		
						2250		60								4		
280	10850			4	30	13250		54560	65000	80000	175	12500	627600	70	200			
						2650		245520	1300	1600	2450	1500	87864	5250	900			
						2400			5000					2	50	1		
						480			100					150	225			
2231	89795	350	1750	303	4620	2349675	11060	220405	226000	228200	1426	698975	2241375	129 ¹ / ₂	99050			
						469935	1659	991823	4520	4564	19964	83877	313793	9700	445725			

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in and the Total Number of Men employed, &c., in District No. 2,

Number.	DISTRICTS.	KINDS OF FISH.								
		Cod, tongues and sounds, brls.	Hake, dried, cwt.	Hake, sounds, lbs.	Haddock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Bass, lbs.	Alewives, brls.
	<i>Restigouche County.</i>									
1	Above Dalhousie.....					7000	..	500800	..	..
2	Dalhousie to Belledune.....					1700	..	32000	..	..
	Totals.....					8700	..	532800	..	..
	Values.....\$					870	..	26640	..	..
	<i>Gloucester County.</i>									
1	Petit Rocher, &c.....					2000	..	..	..	..
2	Bathurst, &c.....					10370	..	115270	8000	..
3	Grande Anse.....		300	120	..	500	..	12500	..	..
4	Upper Caraqueet.....	2	800	..	200	1300	1400	64000	750	950
5	Caraquet.....	27	500	700	500	400	43000	70000	1500	300
6	Shippegan Mainland.....		600	1670	110	..	5640	82120	500	20
7	Shippegan Island.....		320	200	200	..	3000	38600	..	..
8	Miscou, &c.....		200	200	..	..	1800	144000	1600	..
9	Pokemouche.....	5	170	250	152	3400	1500	175500	780	1540
10	Tracadie.....		1200	..	400	1200	800	72000	1800	1800
	Totals.....	34	4090	3140	1562	19170	57140	773990	14930	3340
	Values.....\$	340	10225	1570	5467	1917	5714	38699	1493	13360
	<i>Northumberland County.</i>									
1	Neguac, &c.....		160	..	..	1600	2000	700000	8100	200
2	Bay du Vin, &c.....		..	..	..	1000	5000	834000	21700	300
3	Chatham, &c.....		..	..	..	1800	..	1500000	50000	350
4	North-west Miramichi River.....		..	..	..	25000	..	..	114000	1150
5	South-west Miramichi River.....		..	..	..	5000	..	2500	55000	1250
	Totals.....		160	..	..	34400	7000	3086500	248800	3250
	Values.....\$		400	..	..	3440	700	154325	24880	13000
	<i>Kent County.</i>									
1	Harcourt, &c.....		..	..	..	7600	..	..	900	..
2	Carleton.....		..	..	..	3000	..	160000	50000	..
3	St. Louis.....		200	150	..	6500	..	360000	14000	1400
4	Richibucto, &c.....	23	900	3550	260	1300	1840	1040000	2400	2800
5	Buctouche, &c.....		500	400	..	1200	..	950000	1600	800
6	Cocagne.....		..	..	..	3000	..	440500	2800	200
	Totals.....	23	1600	3950	410	22600	1840	2950500	71700	5200
	Values.....\$	230	4000	1975	1435	2260	184	147525	7170	20800
	<i>Westmorland County.</i>									
1	Shediac, &c.....		100	..	..	6000	..	620070	3000	800
2	Botsford.....		..	..	..	2000	..	210000	3000	100
3	Westmorland and Sackville.....		10	..	..	1500	..	121000	5000	200
4	Dorchester and vicinity.....		..	..	..	1000	..	..	..	..
	Totals.....		110	..	..	10500	..	951000	11000	1100
	Values.....\$		275	..	..	1050	..	47550	1100	4400
1	<i>Albert County.</i>					5000	..	4000	300	25
	Values.....\$					500	..	200	30	100
	Grand totals.....	57	5960	7090	1972	100370	65980	8298790	346730	12915
	Values.....\$	570	14900	3545	6902	10037	6598	414940	34673	51660

the Fisheries, Quantity and Value of Fishing Material, Kinds and Quantities of Fish, Province of New Brunswick, for the Year 1896—*Concluded*.

KINDS OF FISH.								FISH PRODUCTS.					TOTAL VALUE.	Number.
Clams, brls.	Eels, brls.	Shad, brls.	Squid, brls.	Sardines, cans.	Flounders, lbs.	Tom-cod or frost fish, lbs.	Coarse and mixed fish, brls.	Fish oils, galls.	Fish used as bait, brls.	Fish used as manure, brls.	Fish guano, tons.	Seal skins, No.		
.....	.....	.....	.....	.....	2700	17300	.....	.....	800	1500	.....	.....	51,055 00	1
.....	.....	.....	.....	.....	2700	26300	.....	.....	800	1400	.....	.....	61,120 00	2
.....	.....	.....	.....	.....	135	1315	.....	.....	1200	1450	.....	.....	112,175 00	
.....	
.....	10	.....	.....	.....	.....	825200	.....	450	1100	16000	.....	.....	148,352 00	1
900	150	.....	.....	.....	.....	.....	.....	325	10620	38520	.....	.....	588,356 50	2
150	.....	.....	6	.....	.....	.....	.....	2300	2500	300	.....	.....	57,146 00	3
400	25	.....	25	.....	.....	5000	.....	19500	1500	400	.....	.....	38,625 00	4
3500	15	.....	420	.....	.....	26000	.....	2150	3500	1000	.....	.....	301,800 00	5
1050	.....	.....	200	.....	1500	5920	430	2500	3440	1340	.....	.....	75,484 00	6
400	30	.....	.....	.....	.....	.....	.....	5500	4300	2500	.....	.....	110,392 00	7
30	5	.....	.....	.....	.....	.....	.....	2000	4000	600	.....	.....	103,395 00	8
130	36	10	.....	.....	1050	5550	120	200	1250	500	.....	12	48,868 00	9
.....	120	.....	10	.....	3500	3000	.....	250	900	.....	.....	1	184,754 00	10
6560	391	10	661	.....	6050	870670	550	32675	33110	61160	.....	13	.....
13120	3910	100	2644	.....	303	43534	1100	13070	49665	30580	.....	13	1,657,172 50	
.....	
20	25	.....	.....	.....	.....	.....	800	300	3000	2000	.....	4	104,789 00	1
.....	25	500	.....	.....	5000	175000	.....	100	3000	800	500	.....	187,332 00	2
.....	8	400	.....	72000	40000	130000	.....	.....	.....	150	.....	.....	192,420 00	3
.....	200	700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42,500 00	4
.....	10	150	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25,725 00	5
20	268	1750	.....	72000	45000	1475000	800	400	6000	2950	500	4	.....
40	2680	17500	.....	3690	2250	73750	1600	160	9000	1475	12500	4	552,766 00	
.....	
.....	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,150 00	1
.....	30	65	.....	.....	.....	.....	.....	200	1500	.....	.....	.....	63,091 60	2
.....	300	60	.....	.....	9000	50000	20000	300	2000	300	.....	.....	117,890 00	3
20	500	45	.....	.....	9000	30000	.....	380	4800	2800	.....	.....	201,436 00	4
300	150	.....	.....	.....	.....	70000	500	200	3000	.....	.....	.....	128,500 00	5
950	780	.....	.....	.....	.....	1400	100	200	3000	3700	.....	.....	91,377 40	6
1270	1780	170	.....	.....	18000	151400	20600	1280	14300	6800	.....	.....	.....
2540	17800	1700	.....	.....	900	7570	41200	512	21450	3400	.....	.....	603,445 00	
.....	
100	100	.....	.....	.....	.....	10000	300	200	13000	.....	.....	.....	225,090 00	1
25	15	.....	.....	.....	.....	1000	200	.....	17000	300	.....	.....	204,004 00	2
5	25	450	.....	.....	.....	4000	50	.....	2000	500	.....	.....	31,185 00	3
.....	.....	756	.....	.....	.....	.....	150	.....	.....	.....	.....	.....	8,620 00	4
130	140	1200	.....	.....	.....	15000	700	200	32000	800	.....	.....	.....
260	1400	12000	.....	.....	.....	750	1400	80	48000	400	.....	.....	468,899 00	
15	10	200	.....	.....	.....	30000	40	100	.....	.....	.....	.....	.....
30	100	2000	.....	.....	.....	1500	80	40	.....	.....	.....	.....	5,535 00	
7995	2589	3330	661	72000	71750	2568370	22690	34655	86210	74610	500	17	.....
15990	25890	33300	2644	3600	3588	128419	45380	13862	129315	37305	12500	17	3,399,992 50	

RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 2, New Brunswick, for
the Year 1896.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Salmon, fresh.....	Lbs.	2,349,675	0 20	469,935	00
do in cans.....	"	11,060	0 15	1,659	00
Herring.....	Brls.	220,405	4 50	991,822	50
do fresh.....	Lbs.	226,000	0 02	4,520	00
do smoked.....	"	228,200	0 02	4,564	00
Mackerel.....	Brls.	1,426	14 00	19,964	00
do fresh.....	Lbs.	698,975	0 12	83,877	00
Lobsters.....	Cans.	2,241,375	0 14	313,792	50
do.....	Tons.	129 ¹ / ₃	75 00	9,700	00
Cod.....	Cwt.	99,050	4 50	445,725	00
do tongues and sounds.....	Brls.	57	10 00	570	00
Hake.....	Cwt.	5,960	2 50	14,900	00
do sounds.....	Lbs.	7,090	0 50	3,545	00
Haddock.....	Cwt.	1,972	3 50	6,902	00
Trout.....	Lbs.	160,370	0 10	10,037	00
Halibut.....	"	65,980	0 10	6,598	00
Smelts.....	"	8,298,790	0 05	414,939	50
Bass.....	"	346,730	0 10	34,673	00
Alewives.....	Brls.	12,915	4 00	51,660	00
Oysters.....	"	14,700	4 00	58,800	00
Clams.....	"	7,995	2 00	15,990	00
Eels.....	"	2,589	10 00	25,890	00
Shad.....	"	3,330	10 00	33,300	00
Squid.....	"	661	4 00	2,644	00
Sardines.....	Cans.	72,000	0 05	3,600	00
Flounders.....	Lbs.	71,750	0 05	3,587	50
Frost fish.....	"	2,568,370	0 05	128,418	50
Coarse fish.....	Brls.	22,690	2 00	45,380	00
Fish oil.....	Galls.	34,655	0 40	13,862	00
Fish, as bait.....	Brls.	86,210	1 50	129,315	00
do manure.....	"	74,610	0 50	37,305	00
do guano.....	Tons.	500	25 00	12,500	00
Seal skins.....	No.	17	1 00	17	00
Total.....				3,399,992	50

NUMBER and Value of Vessels, Boats, Nets, Traps, &c., engaged in the Fisheries in
District No. 2, New Brunswick, in the Year 1896.

Material.	Value.	Total.
	\$ cts.	\$ cts.
* 208 vessels (aggregate tonnage, 2,489).....	98,350 00	
3,491 boats.....	129,635 00	
513,595 fathoms of nets.....	361,640 00	
2,231 smelt nets.....	89,795 00	
350 bass nets.....	1,750 00	
1 mackerel trap-net.....	3,000 00	
		684,170 00
173,420 lobster traps.....	141,720 00	
191 lobster factories, (4068 hands employed).....	98,300 00	
		240,020 00
10 general canneries.....	13,000 00	
110 freezers and ice houses.....	61,500 00	
641 fish houses and smoke houses.....	35,060 00	
31 piers and wharfs.....	8,500 00	
15 steamers and smacks.....	14,250 00	
303 trawls.....	4,620 00	
850 smelt shanties.....	10,500 00	
		147,430 00
Total value.....		1,071,620 00

NEW BRUNSWICK—DISTRICT NO. 3.

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries; Quantity and Value of Fishing Materials; Kinds and Quantities of Fish, and the Total Number of Men employed, &c., in District No. 3, Province of New Brunswick, for the Year 1896.

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING MATERIAL.						KINDS OF FISH.						Number.	
		Vessels.			Boats.			Gill Nets.		Weirs.		Seines.		Salmon, salted, brls.	Salmon, fresh in ice, lbs.	Finman Haddies, lbs.	Herring, salted, brls.	Herring, fresh or frozen, lbs.	Herring, smoked, lbs.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Number.	Value.									
<i>St. John County</i>																					
1	St. John Harbour	1	21	420	5	200	8000	400	23310	26	9100	7	420	490	58800	600000	400	600000	200000	1	
2	Dipper Harbour	8	160	5200	32	50	2500	100	49800	...	...	6	450	450	40400	...	...	...	...	2
3	Pisarmico	2	35	700	8	50	2500	100	40000	30375	...	5	375	400	75000	...	200	...	...	3
4	Musquash	1	31	620	4	16	800	32	40000	30000	4	1440	12	480	960	50400	...	...	...	4
5	Martin's Head and St. Martin's ..	...	...	...	...	30	1200	60	14400	9900	...	...	...	...	1400	...	300	...	...	5
Totals		12	247	6940	49	346	15000	692	166280	125580	30	10540	30	1725	2300	226000	600000	900	600000	200000	
<i>Other Counties.</i>																					
6	King's .....	...	...	...	...	152	6080	326	19400	4000	...	...	...	...	18000	...	560	...	...	6
7	Queen's	1	12	120	3	210	8400	384	24186	18854	...	...	...	...	26240	...	204	...	...	7
8	Sunbury .....	...	...	...	...	80	800	140	9000	4800	...	...	...	...	1000	...	...	...	...	8
9	York .....	...	...	...	...	98	1950	200	5200	1400	...	...	...	...	10000	...	...	...	...	9
10	Carleton .....	...	...	...	...	...	...	...	520	270	...	...	...	...	3300	...	...	...	...	10
11	Victoria .....	...	...	...	...	100	500	160	1600	800	...	...	...	...	3000	...	...	...	...	11
Grand Totals		13	259	7060	52	1026	33330	1982	226186	155704	30	10540	30	1725	2300	287540	600000	1654	600000	200000	

RETURN showing the Quantity and Value of Fish, &c.—New Brunswick—Continued.

11a-96

DISTRICTS.	KINDS OF FISH.															FISH PRODUCTS.		TOTAL VALUE.	Number.
	Sturgeon, lbs.	Lobsters, alive or fresh, tons.	Cod, dried, cwt.	Cod, tongues and sounds, lbs.	Hake, dried, cwt.	Haddock, cwt.	Pollock, cwt.	Trout, lbs.	Bass, lbs.	Alewives, brls.	Caviare, brls.	Hels, brls.	Shad, brls.	Sardines, brls.	Pickarel, lbs.	Coarse and mixed fish, brls.	Fish Oils, galls.	Fish used as Bait, brls.	
<i>St. John County.</i>																			
1 St. John Harbour		25	80		400	500				18000		100	1000					3000	149,045 00
2 Dipper Harbour		100	150	2	2000	1920	160										60		28,419 00
3 Pisarcino		75	119		350	325				400			25		1500				25,923 00
4 Musquash		30	125		125	150													15,980 00
5 Martin's Head and St. Martin's		60	80		775	350	275											500	11,090 00
Totals		290	554	2	3650	3245	435			18400		100	1025	1500			60	3500	230,457 00
<i>Other Counties.</i>																			
6 King's	25000				400			3600	1665	280	19	26	386		10000	210	300		15,885 00
7 Queen's								3320		1100		42	720		90000	20			23,211 20
8 Sunbury								3600		1620		8	70		24000				9,020 00
9 York								8000		20			200		4000	24			5,152 00
10 Carleton								14000				4	20		1800	26			2,468 00
11 Victoria								30000					30			130			4,546 00
Grand Totals	25000	290	554	2	4050	3245	435	62520	1665	21420	19	180	2401	1500	128800	410	360	3500	290,739 20

RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 3, New Brunswick,
for the Year 1896.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Salmon, salted.....	Brls. 16	16	00	256	00
do fresh.....	Lbs. 287,540	0	20	57,508	00
Herring, salted.....	Brls. 1,964	4	50	7,488	00
do frozen.....	Lbs. 600,000	0	02	12,000	00
do smoked.....	" 200,000	0	02	4,000	00
Finnan haddies.....	" 600,000	0	04½	27,000	00
Sturgeon.....	" 25,000	0	07	1,750	00
Lobsters.....	Tons. 290	75	00	21,750	00
Cod.....	Cwt. 554	4	50	2,493	00
Tongues and sounds.....	Brls. 2	10	00	20	00
Hake.....	Cwt. 4,050	2	50	10,125	00
Haddock.....	" 3,245	3	50	11,357	50
Pollock.....	" 435	2	50	1,087	50
Trout.....	Lbs. 62,520	0	10	6,252	00
Bass.....	" 1,665	0	08	133	20
Alewives.....	Brls. 21,420	4	00	85,680	00
Caviare.....	Lbs. 3,800	0	17½	665	00
Eels.....	Brls. 180	10	00	1,800	00
Shad.....	" 2,401	10	00	24,010	00
Sardines.....	" 1,500	1	50	2,250	00
Pickarel.....	Lbs. 129,800	0	05	6,490	00
Coarse fish.....	Brls. 410	3	00	1,230	00
Fish oil.....	Gals. 300	0	40	144	00
Fish for bait.....	Brls. 3,500	1	50	5,250	00
Total value of fish.....				290,739	20

NUMBER and Value of Vessels, Boats, Nets, Weirs, &c., engaged in the Fisheries of
District No. 3, New Brunswick.

Material.	Value.		Total.	
	\$	cts.	\$	cts.
13 vessels (259 tons).....	7,060	00		
1,026 boats.....	33,330	00		
226,186 fathoms nets.....	155,704	00		
30 weirs.....	10,540	00		
30 seines (1,725 fathoms).....	2,300	00		
9,060 lobster traps.....	6,795	00	208,934	00
26 ice houses.....	5,900	00		
45 smoke and fish houses.....	40,000	00		
6 steamers and smacks.....	600	00		
115 trawls.....	2,775	00		
68 wharfs and piers.....	19,800	00		
Total value of material.....			75,870	00
			284,804	00

RECAPITULATION showing the Number and Value of Vessels and Boats engaged in the Fisheries, Fishing Materials, and the Kinds and Quantities of Fish, as well as the Number of Men Employed in the Fishing Industry of the Province of New Brunswick, for the Year 1896.

Number.	FISHING VESSELS AND BOATS.				FISHING MATERIAL.						KINDS OF FISH.								
	Vessels.				Boats.		Gill-Nets.			Snelt-Nets.		Weirs.		Seines.			Salmon, salted, brls.	Salmon, preserved in cans, lbs.	Herring, salted, brls.
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Number.	Value.	Number.	Fathoms.	Value.					
1 Restigouche	197	2275	93300	686	194	3450	358	25015	25015	220	13000					326400	1283915	10530	2000
2 Gloucester.	8	178	4100	33	1406	65225	2893	196080	88375	292	3895					636710	500	6200	3
3 Northumberland.	3	36	950	10	832	28350	1756	70900	17300	653	27230					33020	4	33020	4
4 Kent	3	36	950	10	832	28350	1756	70900	17300	653	27230					37000	5	13250	5
5 Westmoreland					392	14900	711	48300	20100	280	10850					2400	6	2400	6
6 Albert.					3	90	9	600	350								226000	900	7
7 St. John.	12	247	6340	49	346	15000	692	166280	125380			30	10540	30	1725	2300	18000	560	8
8 King's.					152	6080	326	19400	4000							26240	204	9	9
9 Queen's	1	12	120	3	210	8400	384	24186	18854							1000	1000	10	10
10 Sumbury					80	800	140	9000	4800							10000	10000	11	11
11 York.					98	1950	200	5200	1400							3300	12	3300	12
12 Carleton.					40	600	80	520	270							16	3000	13	13
13 Victoria					100	500	160	1600	800										
14 Charlotte.	53	1010	25750	254	1045	80922	1288	23424	7428	53	427	97600	267	7300	14919	350		10149	14
Totals.	274	3758	131160	1035	5562	243887	10235	763205	524772	2284	90222	297	108140	297	9025	17219	2637565	11060	232218

RECAPITULATION showing the Kinds, Quantities and Values of Fish, &c.—New Brunswick—Continued.

KINDS OF FISH.																			
DISTRICTS.		Herring, fresh or frozen, lbs.	Herring, smoked, lbs.	Mackerel, salted, bris.	Mackerel, fresh or preserved, in cans, lbs.	Lobsters, preserved, in cans, lbs.	Lobsters, alive or fresh, tons.	Cod, dried, cwt.	Cod, tongues, and sounds, bris.	Hake, dried, cwt.	Hake, sounds, lbs.	Haddock, cwt.	Pinnaw Haddies, lbs.	Pollock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Bass, lbs.	Number.
1	Restigouche.....	30000	.....	.....	4000	32500	6½	40	.....	.....	.....	.....	.....	.....	8700	.....	532800	.....	1
2	Gloucester.....	75000	43200	996	105475	944175	29	96170	34	4090	3140	1562	.....	.....	19170	57140	773990	14330	2
3	Northumberland.....	1000	60000	.....	72000	166500	6	650	.....	160	.....	.....	.....	.....	3440	7000	3086500	248800	3
4	Kent.....	50000	45000	255	505000	470600	16	1940	23	1600	3850	410	.....	.....	22600	1840	2950500	71700	4
5	Westmoreland.....	65000	80000	175	12500	627600	70	200	.....	110	.....	.....	.....	.....	10500	.....	951000	11000	5
6	Albert.....	5000	.....	.....	.....	.....	2	50	.....	.....	.....	.....	.....	.....	5000	.....	4000	300	6
7	St. John.....	600000	200000	.....	.....	.....	290	554	2	3650	.....	3245	600000	435	.....	.....	.....	.....	7
8	King's.....	.....	.....	.....	.....	.....	.....	.....	.....	400	.....	.....	.....	.....	3600	.....	.....	1665	8
9	Queen's.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3320	.....	.....	.....	9
10	Sunbury.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3600	.....	.....	.....	10
11	York.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8000	.....	.....	.....	11
12	Carleton.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14000	.....	.....	.....	12
13	Victoria.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30000	.....	.....	.....	13
14	Charlotte.....	12645760	9767400	.....	.....	114432	988	9273	.....	15823	15192	15399	195000	4551	13250	149640	11273	.....	14
Totals.....		13469760	10195600	1426	698975	2355807	1357½	108877	59	25833	22282	20616	795000	45946	176140	215620	8310063	348395	

RECAPITULATION showing the Kinds, Quantities and Values of Fish, &c.—New Brunswick—Concluded.

Number.	DISTRICTS.	KINDS OF FISH.										FISH PRODUCTS.				TOTAL VALUE.	Number.		
		Alewives, brls.	Oysters, brls.	Clams, brls.	Hels, brls.	Shad, brls.	Squid, brls.	Sardines. Cans.	Pickrel, lbs.	Flounders, lbs.	Tom cod or frost fish, lbs.	Coarse and mixed fish, brls.	Fish oils, galls.	Seal skins, No.	Fish used as bait, brls.			Fish used as manure, brls.	Fish guano, tons.
1	Restigouche.....	3340	1270	6560	301	10	661	.....	2700	26300	550	32675	13	800	2900	61160	.....	112,175 00	1
2	Gloucester.....	3250	7400	20	268	1750	.....	.....	6050	870670	800	400	4	6000	2950	500	.....	1,657,172 50	2
3	Northumberland.....	5200	5730	1270	1780	170	.....	72000	45000	1475000	20600	1280	.....	64300	6800	.....	500	552,746 00	3
4	Kent.....	3200	5730	1270	1780	170	.....	.....	18000	151400	20600	1280	.....	14300	6800	.....	500	603,445 00	4
5	Westmoreland ..	1100	300	130	140	1200	.....	.....	.....	15000	700	200	.....	32000	800	.....	.....	468,899 00	5
6	Albert.....	25	.....	15	10	200	.....	.....	.....	30000	40	100	.....	.....	.....	.....	.....	5,535 00	6
7	St. John.....	18400	.....	.....	100	1025	.....	*1500	.....	.....	.....	.....	60	3500	.....	.....	.....	230,457 00	7
8	King's.....	280	.....	.....	26	336	.....	.....	10000	.....	210	300	.....	.....	.....	.....	.....	15,885 00	8
9	Queen's.....	1100	.....	.....	42	720	.....	.....	90000	.....	20	.....	.....	.....	.....	.....	.....	23,211 20	9
10	Sunbury.....	1620	.....	.....	8	70	.....	.....	24000	.....	24	.....	.....	.....	.....	.....	.....	9,020 00	10
11	York.....	20	.....	.....	.....	200	.....	.....	4000	.....	26	.....	.....	.....	.....	.....	.....	5,152 00	11
12	Carleton.....	.....	.....	.....	4	20	.....	.....	1800	.....	130	.....	.....	.....	.....	.....	.....	2,468 00	12
13	Victoria.....	.....	.....	42583	.....	30	935	405500 *82479	2500	7729	2500	52	35557	4	5049	5562	135	4,546 00	13
14	Charlotte.....	250	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41,108,701 76	14
Totals.....		34585	14700	10578	2769	5731	1596	477500 *83979	132300	79479	2570870	23152	70572	21	94759	80172	635	4,799,433 46	

* Barrels.

Include here 427,800 lbs shelled clams valued at \$2,780
 24,000 cans " preserved " 2,400
 scallops, fresh and " 1,700

RECAPITULATION of the Number and Value of Vessels, Boats, Nets, &c., engaged in the Fisheries of the whole Province of New Brunswick with approximate value of other fishing material, 1896.

Articles.	Value.	Total.
	\$	\$
274 fishing vessels (3,758 tons) (1,035 men)	131,160	
5,562 do boats (10,235 men)	243,887	
763,205 fathoms of gill-nets	524,772	
297 seines (9,025 fathoms)	17,219	
297 weirs	108,140	
2,284 smelt-nets	90,222	
350 bass-nets	1,750	
500 dip-nets	2,500	
1 trap-net (mackerel)	3,000	
3,000 hand lines	3,000	
1,332 trawls	14,395	
198 lobster canneries (4,208 men)	112,500	1,140,045
205,621 do traps, lines, &c.	167,805	
12 general canneries	16,000	280,305
1 fish curing factory	3,500	
850 smelt shanties	10,500	
30 fish presses	3,000	
145 freezers or ice-houses	84,150	
1,436 smoke and fish houses	232,204	
33 steamers and smacks	20,800	
80 scows	4,000	
50 pile drivers	500	
1 guano factory	5,000	
330 fishing piers and wharfs	78,455	
		458,109
Total		1,878,459

RECAPITULATION

Of the Yield and Value of the Fisheries of the whole Province of New Brunswick
for the year 1896.

Kinds of Fish.	Quantity.	Price.		Value.		Total Value.
		\$	cts.	\$	cts.	
Salmon, fresh..... Lbs.	2,637,565	0	20	527,513	00	529,428 00
do preserved, in cans..... "	11,060	0	15	1,659	00	
do salted..... Brls.	16	16	00	256	00	
Herring, salted..... "	232,218	4	50	1,044,981	00	1,518,288 20
do fresh..... Lbs.	13,469,760	0	02	269,395	20	
do smoked..... "	10,195,600	0	02	203,912	00	
Mackerel, salted..... Brls.	1,426	14	00	19,964	00	103,841 00
do fresh..... Lbs.	698,975	0	12	83,877	00	
Lobster, preserved, in cans..... "	2,355,807	0	14	329,812	98	436,302 98
do fresh or alive..... Tons.	1,357 $\frac{1}{2}$			106,490	00	
Cod, dried..... Cwt.	108,877	4	50	489,946	50	490,536 50
do tongues and sounds..... Brls.	59	10	00	590	00	
Hake, dried..... Cwt.	25,833	2	50	64,582	50	75,723 50
do sounds..... Lbs.	22,282	0	50	11,141	00	
Haddock, dried..... Cwt.	20,616	3	50	72,156	00	118,656 00
do smoked, finnan haddies..... Lbs.	795,000			46,500	60	
Pollack, dried..... Cwt.	45,946	2	50			114,865 00
Halibut, fresh..... Lbs.	215,620	0	10			21,562 00
Trout..... "	176,140	0	10			17,614 00
Smelts..... "	8,310,063	0	05			415,503 15
Bass..... "	348,395	0	10			34,806 20
Alewives, salted..... Brls.	34,585	4	00			138,340 00
Shad, salted..... "	5,731	10	00			57,310 00
Eels, salted..... "	2,769	10	00			27,690 00
Squid..... "	1,596	4	00			6,384 00
Sardines..... "	83,979			167,208	00	191,083 00
do preserved in oil..... Cans.	477,500	0	05	23,875	00	
Pickarel..... Lbs.	132,300	0	05			6,615 00
Flounders..... "	79,479	0	05			4,128 53
Frost fish or Tom cods..... "	2,570,870	0	05			128,543 50
Oysters..... Brls.	14,700	4	00			58,800 00
Clams..... "	10,578			19,218	75	24,398 75
do shelled or canned..... "				5,180	00	
Scallops, fresh or canned..... Lbs.	25,000	0	07	1,750	00	1,750 00
Sturgeon..... "	3,800	0	17 $\frac{1}{2}$	665	00	
Coarse and mixed fish..... Brls.	23,152					2,415 00
Seal skins..... No.	21					46,714 00
Fish oils..... Galls.	70,572					29 00
do as bait..... Brls.	94,759					30,006 65
do as manure..... "	80,172					142,138 50
do guano..... Tons.	635					40,086 00
Total for 1896.....						15,875 00
						4,799,433 46

APPENDIX No. 5.

PRINCE EDWARD ISLAND.

REPORT ON THE FISHERIES OF PRINCE EDWARD ISLAND FOR 1896,
BY INSPECTOR OF FISHERIES S. F. PERRY.

TIGNISH, P.E.I., 8th February, 1897.

Honourable L. H. DAVIES,
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit my report on the fisheries of this province for the season just closed.

The fisheries generally along the coast of Prince Edward Island, with the exception of herring, may be considered below the average of other years.

HERRING

appeared generally the first week of May, and catches were good all along the north side, but they were scarce on the south side. Altogether enough of these fish were secured for home consumption, the most of them being used for lobster and mackerel bait, and about 5 per cent for food.

LOBSTERS.

The work of fishing and canning commenced early in May. The quantity canned shows a decrease as compared with other years, notwithstanding that some new factories were added. More boats, traps and men were employed than in former years, which goes to show that this once great industry is falling off.

The close season was fairly well observed from the West Point round by the North Cape to Malpeque on the north side.

At lot 7, on the west shore, some of the fishermen and packers fished and packed till the latter end of September. The guardians kept patrolling along the shore until they succeeded in prosecuting and convicting four of these parties. There was also some illicit fishing and packing along Egmont Bay and other points on the south side, which in some cases is done at night and in the woods. It is a matter of great importance that the regulations should be strictly enforced. The general impression among packers and fishermen is that short season and most rigid enforcement of the regulations are the only means of protecting this industry.

COD.

This fishery is not carried on to any large extent by our fishermen. At the time that the cod make their appearance the fishermen generally are employed fishing lobster, and about the first week in July, when the mackerel appear, they turn their attention to that fishing. The boats which are used for lobster and mackerel fishing are of a small size and not fit to follow the cod on the banks. There is no doubt cod fishing would be remunerative if properly prosecuted. Over one hundred large boats come from Gloucester County, N.B., every year and fish off the North Cape, about ten miles off the land. They report doing well. They also catch

a large quantity of fall herring which are equal in quality to Labrador herring. These large boats take refuge in stormy weather in Tignish harbour, and often close the mouth of the harbour so that our small mackerel boats cannot get out for the morning fishing which is a drawback to our own people.

MACKEREL.

These fish were caught first about the first week of July in small quantities but a very large size, and kept scarce all the season; in fact no big catches were reported and the mackerel fishing season ended as it commenced with very poor results. The general impression among fishermen is that no mackerel nets, nor seines or traps should be allowed, and no other mode of fishing mackerel should be allowed only hook and line. They claim that the bait that is used to catch them tends to keep the fish on the ground.

The failure of mackerel fishing is severely felt by our fishermen and the merchants who supply them.

OYSTERS.

Oyster fishing commenced on the 15th September and was actively carried on as long as the weather permitted. At the outset several fishermen used drags, but the department at once forbade them. The fishery staff had a good deal of trouble in stopping them, indeed the officers deserve a good deal of credit for the way in which they behaved, and after punishing several of them the season closed with no drags in use. People who pretend to know say that drags and spring fishing are injurious; they also believe that fishing oysters should not begin till the first of October. The catch in Richmond Bay is falling off from year to year, and unless the regulations are strictly enforced this industry will ultimately be destroyed.

SMELTS.

Smelt fishing has been prosecuted vigorously this season and the catch a fair average one. No illicit fishing is reported.

TROUT

are caught in small quantity for home consumption; the rivers are well guarded and no poaching is reported so far. Dunk River is well protected by guardians and all seems to be satisfactory.

The yield of the fisheries of this province is disposed off as follows:—

Salmon.	—95	per cent	for home consumption.
"	5	"	exported to the United States.
Herring.	—All	used	for home consumption for lobster and mackerel bait.
Lobster.	—35	per cent	exported to Europe.
"	45	"	to United States.
"	20	"	used in Canada.
Cod.	—50	"	for home use.
"	50	"	sold in Canada.
Hake.	—70	"	home consumption.
"	30	"	sold in Canada.
Smelts.	—95	"	exported to United States.
"	5	"	home consumption.
Oyster.	—90	"	sold in Canada.
"	10	"	home consumption.

I have the honour to be,
Your obedient servant,

S. F. PERRY,
Inspector of Fisheries.

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, &c.—Prince Edward Island
—Continued.

Number.	DISTRICTS.	KINDS OF FISH.														FISH PRODUCTS.			TOTAL VALUE.	Number.
		Hake, dried, cwt.	Hake, sounds, lbs.	Haddock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Alewives, brls.	Oysters, brls.	Clams, brls.	Reis, brls.	Squid, brls.	Tom Cod or Frost Fish, lbs.	Coarse and Mixed Fish, brls.	Fish Oils, galls.	Fish used as bait, brls.	Fish Guano, tons.			
King's County.																				
1	Souris and Red Point.	2660	6000	..	700	..	..	..	..	125	15	30	500	700	2150	1200	60	40,697 76	1
2	Annandale (for Dundas)	2000	4500	..	2000	..	7000	..	..	..	10	10	..	..	1725	3000	200	55,981 68	2
3	Bay Fortune	320	640	..	2500	..	1500	..	..	60	15	..	..	..	350	550	..	12,156 96	3
4	Georgetown	725	1450	..	..	..	500	..	..	75	..	..	1000	..	720	1000	30	39,356 72	4
5	Murray Harbour, North.	1200	2400	..	..	..	..	..	..	..	50	..	..	..	1100	2500	..	30,902 66	5
6	Murray Harbour, South	2800	5800	..	6000	..	2000	200	15	..	20	6	1000	..	2800	2500	75	52,643 44	6	
7	Morell and St. Peter's.	2300	4800	..	1000	1000	500	100	..	..	4	..	..	..	3400	3500	40	79,178 24	7
8	Nauffrage	50	125	50	3000	1000	..	..	..	..	20	..	1000	..	410	1000	30	21,498 74	8
9	North Lake.	100	200	25	3000	..	..	50	..	..	5	..	..	..	370	850	30	16,385 28	9
10	East Lake . . . . .	..	..	..	3000	..	..	..	..	..	..	..	..	..	125	650	50	12,767 76	10
	Totals.	12095	25915	75	18200	1000	11500	350	15	260	139	46	3500	700	13150	16750	515	..		
	Values	36285	12958	263	1820	100	575	1400	60	780	834	184	175	1400	5260	25125	5150	370,519 24		

RETURN showing the Number, Tonnage and Value of Vessels and Boats, and the Quantity and Value of all Fishing Material, &c.—
 Prince Edward Island—Continued.

Number.	FISHING VESSELS AND BOATS.										FISHING MATERIALS.						LOBSTER PLANT.				KINDS OF FISH.					
	Vessels.			Boats.			Gill-Nets.		Snares.		Smelt-Nets.		Trawls.		Traps.		Canneries.		Herring, salted, lbs.	Herring, fresh or frozen, lbs.	Mackerel, salted, brls.					
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.										
Queen's County.																										
1	Tracadie					76	3040	155	7200	2520		3	4000	1000	20	575	30	350	3380	2350	3	4700	100	1025	275	125
2	New London	1	52	1000	7	60	2000	90	3500	1000		4	750	700			7	140	5200	2750	3	4200	90	500	50000	200
3	Crapaud					32	1022	49							7	260			4350	1900	4	2100	69	580		3
4	Point Prim					30	600	60				1	200	150	3	75	12	180	12925	6775	19	4725	186	300	2000	5
5	Rustico	4	86	3000	22	62	5200	190	1900	600		7	1300	2000	4	80	5	60	6500	2980	5	4500	91	4000	200	
6	Charlottetown																									
7	Wheatly River					6	120	12							1	30			8200	4050	10	3050	116	30		4
8	Lot 65					79	2080	145	890	341									4200	2632	3	2400	58			
9	Pownal					34	272	60							3	90										
10	Bays and rivers					40	400	80																		
	Total..	5	138	4000	29	422	14934	851	13540	4481		15	6250	3850	38	1110	54	730	44755	23087	47	25675	710	6435	52275	537
	Values.....																							28957	523	7518

RETURN showing the Number, Tonnage and Value of Vessels and Boats, and the Quantity and Value of all Fishing Material, &c.—
Prince Edward Island—Continued.

Number.	DISTRICTS.	KINDS OF FISH.													FISH PRODUCT.				TOTAL VALUE.			
		Mackerel, fresh or pre- served (in cans), lbs.	Lobsters, preserved, in cans, lbs.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Hake, dried, cwt.	Hake, sounds, lbs.	Haddock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Alwives, brls.	Oysters, brls.	Clams, brls.	Eels, brls.	Squid, brls.	Tom cod or frost fish, lbs.	Fish oils, galls.		Fish used as bait, brls.	Fish used as manure, brls.	Fish guano, tons.
Queen's County.																						
1	Tracadie.....	500	55876	2300	.....	100	.....	300	800	.....	95000	350	1400	25	150	.....	.....	1150	1250	100	200	43,137 89
2	New London.....	.....	53568	1000	.....	100	.....	150	.....	1000	.....	50	350	15	15	.....	.....	500	900	.....	.....	21,779 52
3	Crapaud.....	.....	29406	.....	.....	.....	.....	.....	.....	.....	2100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,873 84
4	Point Prim.....	.....	120658	25	1	35	.....	5	800	100	4000	30	100	5	5	.....	200	20	150	25	320	22,767 62
5	Rustico.....	.....	79200	600	.....	.....	.....	200	400	.....	6000	.....	3800	80	40	100	.....	650	1200	.....	200	40,648 00
6	Charlottetown.....	.....	.....	1000	.....	.....	.....	500	225	.....	2000	.....	.....	100	35	5	.....	80	100	.....	3	15,740 00
7	Wheatly River.....	.....	191818	.....	.....	.....	.....	.....	.....	.....	.....	.....	1207	.....	.....	.....	.....	.....	.....	.....	.....	7,305 50
8	Lot 65.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26,854 52
9	Pownal.....	.....	32183	.....	.....	.....	.....	.....	.....	.....	300000	100	4500	50	100	.....	.....	.....	.....	.....	.....	9,333 62
10	Bays and rivers.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34,550 00
	Totals	500	562709	4925	1	235	40	1155	6225	1100	419100	530	11357	275	345	105	200	2400	3600	125	723	228,990 51
	Values	60	78779	22163	10	705	20	4043	622	110	20955	2120	45428	825	2070	420	10	960	5400	62	7230	228,990 51

Return showing the Number, Tonnage and Value of Vessels and Boats, and the Quantities and Value of all Fishing Materials, &c.,
 Prince Edward Island—Continued.

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.					FISHING MATERIAL.					KINDS OF FISH.					
		Vessels.		Boats.			Gill-Nets.		Smelt-Nets.		Trawls.	Herring, salted, brls.	Herring, fresh or frozen, lbs.	Herring, smoked, lbs.	Mackerel, salted, brls.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Fathoms.	Value.	Number.							
Prince County.																	
1	Tignish.....					53	2477	274	2000	1000						4225	616
2	Nail Pond.....					49	2200	180	1131	550						2035	173
3	Frog Pond.....					79	1750	184	8250	2100						3300	284
4	Mimmgash.....					38	840	94	1560	1731						700	400
5	Alberton.....	2	45	1000	8	34	1730	72	1700	670						1198	55
6	Narrows and Lot 11					10	250	30	370	185						430	5
7	Ellersly Lot 12					21	1500	75	2000	300						1565	5
8	Grand River.....	1	12	500	5	3	150	9	80	50						1500	15
9	Malpeque.....	1	65	2000	4	60	3000	180	1000	1000						2000	7
10	Richmond Bay.....					175	2800	350	800	200						3000	100
11	Roxbury Lot 6.....	1	16	350	5	5	200	11	45	12						1000	9
12	Fifteen Point.....					96	3840	192	4000	400						1000	28
13	Brae.....					24	420	38								13	11
14	West Point.....					100	3500	300	4400	1220						200	10
15	Traveller's Rest.....	1	15	400	3	77	1140	155	215	85						200	10
16	Carleton.....					31	775	49	750	375						100	950
17	Summerside.....					41	1110	54	1048	211						1095	45
18	Tryon.....															778	16
	Total.....	6	153	4250	25	896	27682	2242	29349	10089						21173	1000
	Value.....															95279	10
																	4
																	37604

NOTE.—In No. 1, add 1 trap-net and 1 seine, \$500 each.
 " 9, add 2 seines, \$200 each.

RETURN showing the Kinds and Quantities of Fish and Fish Products, &c., Prince Edward Island.—Continued.

Number.	Districts.	KINDS OF FISH.										FISH PRODUCTS.				TOTAL VALUES		Number.
		Mackerel, fresh or pre- served, in cans, lbs.	Lobster, preserved, in cans, lbs.	Cod, dried, cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Smelts, lbs.	Alwivies, brls.	Oysters, brls.	Clams, brls.	Eels, brls.	Tom cod or frost fish, lbs.	Fish oils, gals	Fish used as bait, brls.	Fish guano, tons.	\$	cts.	
Prince County.																		
1	Tignish.....	7680		438	300	400							1350				32,169	10
2	Nail Pond.....			250	35								250				12,909	50
3	Frog Pond.....			430	225	400							350				21,776	00
4	Mimmgash.....			738	755	1165							643				17,416	70
5	Alberton.....		45600	270									260	712			16,514	50
6	Narrows and Lot 11.....		30				18600		137			7		430			8,032	92
7	Ellerslie Lot 12.....		27128	1000	400		8000		1600	1	30		50	1450			26,676	40
8	Grand River.....		34560	210			32000		2540				100	200			15,423	00
9	Malpeque.....		10560	40			12000		4200			5	100	600			41,514	00
10	Richmond Bay.....		57600				100		6000	20		2	6	900			32,324	08
11	Roxbury Lot 6.....		12912	40			17000		375			112	150				4,071	50
12	Fifteen Point.....		268416	206										4000	400		49,068	24
13	Brae.....		9600				14000		290	5	10			200			4,619	00
14	West Point.....		3500											2900	75		32,488	00
15	Traveller's Rest.....		91200				50000		3700		10		14	125			19,671	10
16	Carleton.....		6000				64000							1095	77		20,404	96
17	Summerside.....		70464				22000										1,100	00
18	Tryon.....		106569				10900								954		20,436	66
Totals.....		11180	740609	3652	1715	1965	248600	10	18842	26	176	100	3213	13566	552			
Values.....		1342	103685	16434	5145	982	12430	40	75368	78	1056	5	1285	20349	5520		376,616	06

RECAPITULATION showing the Quantity and Value of Fish, &c.—Prince Edward Island, for the Year 1896.—Continued.

DISTRICTS.	KINDS OF FISH.												FISH PRODUCTS.				TOTAL VALUE.	Number.			
	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alwives or gaspe- reau, brls.	Clams, brls.	Eels, brls.	Oysters, brls.	Tom-cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oils, galls.			Fish used as bait, brls.	Fish used as manure, brls.	Fish guano, tons.
1 King's.....	14240	...	75	12095	25015	1000	18200	11500	350	260	139	15	3500	46	700	13150	16750	...	515	370,519 24	1
2 Queen's.....	4925	11155	235	285	40	1100	6225	419100	530	275	345	11357	200	105	...	2400	3600	125	723	228,990 51	2
3 Prince.....	3652	...	...	1715	1965	...	...	248600	10	26	176	18842	100	...	...	3213	13566	...	552	376,616 06	3
Totals.....	22817	1	1230	14045	27020	2100	24425	679200	890	561	660	30214	3800	151	700	18763	33916	125	1790	976,125 81	

RECAPITULATION

SHOWING Yield and Value of the Fisheries in the Province of Prince Edward Island, during the Year 1896.

Kinds of Fish.	Quantity.	Price.	Value.	Total Value.
		\$ cts.	\$ cts.	\$ cts.
Salmon, preserved in cans..... Lbs.	500	0 15		75 00
Herring, salted..... Brls.	49,683	4 50	223,573 50	
do fresh..... Lbs.	53,275	0 01	532 75	
do smoked..... "	200	0 02	4 00	224,110 25
Mackerel, fresh..... "	11,680	0 12	1,401 60	
do salted..... Brls.	4,159	14 00	58,226 00	59,627 60
Lobsters..... Lbs.	2,028,709	0 14		284,019 26
Cod, dried..... Cwt.	22,817	4 50	102,676 50	
do tongues and sounds..... Brls.	1	10 00	10 00	102,686 50
Haddock, dried..... Cwt.	1,230	3 50		4,305 00
Hake, dried..... "	14,045	3 00	42,135 00	
do sounds..... Lbs.	27,920	0 50	13,960 00	56,095 00
Halibut..... "	2,100	0 10		210 00
Trout..... "	24,425	0 10		2,442 50
Smelts..... "	679,200	0 05		33,960 00
Alewives..... Brls.	890	4 00		3,560 00
Clams..... "	561	3 00		1,683 00
Eels..... "	660	6 00		3,960 00
Oysters..... "	30,214	4 00		120,856 00
Tom cod or frost fish..... Lbs.	3,800	0 05		190 00
Squid..... Brls.	151	4 00		604 00
Coarse and mixed fish..... "	700	2 00		1,400 00
Fish oils..... Galls.	18,763	0 40		7,505 20
Fish as bait..... Brls.	33,916	1 50		50,874 00
Fish as manure..... "	125	0 50		62 50
Fish guano..... Tons.	1,790	10 00		17,900 00
Total for 1896.....				976,125 81
do 1895.....				976,836 64
Decrease.....				710 83

RECAPITULATION

SHOWING the Number and Value of Vessels, Boats, Nets, &c., engaged in the Fisheries of the Province of Prince Edward Island, season 1896.

Number.	Articles.	Value.	Total Value.
		\$	\$
17	Vessels, 493 tons (86 men)	12,050	
2,069	Boats (4,668 men)	55,551	
86,209	Fathoms gill-nets	31,820	
18	Seines, 6,850 fathoms	4,750	
1	Trap net.....	500	
396	Trawls	6,490	
124	Smelt nets.....	2,930	
			114,091
174	Canneries (3,748 hands).....	109,123	
219,105	Lobster traps.....	117,432	
			226,555
2	Ice-houses.....	140	
5	Smoke-houses and fish-houses.....	155	
26	Piers and wharfs	24,650	
2	Steamers and smacks.....	6,400	
			31,345
	Total value.....		371,991

APPENDIX No. 6.

QUEBEC.

REPORT ON THE GULF OF ST. LAWRENCE FISHERIES, FOR THE YEAR 1896, BY COMMANDER WM. WAKEHAM, INCLUDING SYNOPSES OF THE LOCAL OVERSEERS' REPORTS OF THE WHOLE PROVINCE.

GASPE BASIN, 2nd January, 1897.

The Honourable

L. H. DAVIES,

Minister of Marine and Fisheries.

SIR,—I beg to present the report on the fisheries of the Gulf Division, together with synopses of the reports of the various local fishery officers, and the statistics of the catch for the season of 1896.

These returns show a considerable gain in the total value of the fisheries, calculated at the usual rates, as compared with the previous season. As a matter of fact, however, though there was in many branches of the fishery an increase in the catch, the prices actually obtained were lower than usual, and exporters have not done as well as in previous years when the actual volume of the fishery was much smaller.

The completed statistics show that in 1896 the value of the catch, computed at the same rates as in 1895, was \$1,674,586.03—while in 1895 we had a yield estimated at \$1,518,829.43—being a gain of \$155,756.60 for the year just closed. The leading branches of the fishery are dealt with under separate heads.

COD.

Cod-fishing began early, and on the south shore the yield of the summer fishery, which closes about the 15th August, was a fair average. On the north shore, west of Natashquan, during the same season, cod were not as abundant as usual, in fact at the extreme western end of this coast, from Moisie to Manicouagan, the summer fishery was almost a complete failure. Strong westerly winds prevailed, as a result the bait was kept off shore, and the cod naturally followed, while the boats were frequently for many days in succession unable to venture out. At and below Natashquan going east as far as St. Mary's Islands, cod were more than usually abundant, and large catches were made by such vessels as were fortunate enough to have followed the fishing on this part of the coast. In the neighbourhood of Cape Whittle several Nova Scotia vessels secured fares of over 1,200 cwt. each in three weeks. Below St. Mary's on down to Blancs Sablons, the fishery was irregular, the schools only striking

in here and there and never holding long at one point. At Blancs Sablons and on down through the Straits of Belle Isle the fishery was unusually good, the harbours and coves being sometimes literally blocked with fish. It was generally considered that the presence of this enormous volume of cod in the straits was due to an ice blockade of the outer Labrador Coast, which prevented the bulk of the fish from passing on down to the north, and turned them into the straits. As the fishing on many parts of Big Labrador was a failure there would seem to have been some ground for this conclusion.

Cod were very abundant during the season of the fall fishery, which begins with September and ends with October, but unfortunately the weather was rough, and comparatively little fishing could be done. Many boats were either destroyed, or damaged by being washed ashore from, or broken up on their moorings. This was particularly the case at Percé where on the night of the 1st of October over 40 boats were either totally lost, or so damaged as to have been rendered useless for the balance of the season. Immediately prior to this storm the boats had been taking all the fish they could handle.

These constantly recurring losses speak more loudly than words, as to the necessity for furnishing at the large fishing centres some shelter for the fishing boats, and though such a complete loss of property as that which occurred at Percé appeals more directly to our sympathy, it should be understood that it is a mere bagatelle compared to the losses which are constantly happening owing to the lack of the necessary shelter along a large part of the coast, as on the slightest appearance of bad weather the boats are either afraid to venture out at all, or if actually on the fishing grounds are obliged to up anchor and run before completing their trips so as to reach shore and be beached before the sea has had time to make. The act of beaching a heavy boat in rough weather is one which no matter how carefully or skilfully done always causes strain and injury; then again when the boats are once ashore and hauled up several days are lost before they can be launched again and re-balasted, for though a boat may be beached with a heavy swell on shore, it requires absolutely smooth water to relaunch her. It is safe to say that at an exposed station like Percé one-fourth of the fishing season is lost in this way, and the same causes operate to a greater or less extent at all stations where there are not secure harbours. This want of shelter operates against the fisherman and the fishing interests in still another way, as owing to the necessity for beaching the boats, they have to be built as slightly as possible, and their size has to be kept down so that they may be easily handled, and quickly run up on the beach—as a consequence we have a class of boats that is too small to carry on the fishery to advantage, they can not hold enough—they cannot venture far enough to sea to reach the outer banks, which they should be able to fish, when the inshore fishing is slack—so that generally speaking they are not as able, safe, solid and comfortable as they should be. It is of course quite out of the question to build breakwaters at all the points where they are asked for—but at certain central stations, to be selected by impartial experts, harbours of refuge should be provided at which the boats could rendezvous and be kept afloat. Protecting the fisherman from loss, and enlarging the field of his operations means cheapening the cost of his product. Our fishing industry never required this assistance as much as it does to-day when owing to a variety of circumstances our exporters are practically shut out from all of their usual markets. In Spain, Portugal, and throughout the Mediterranean the heavily bountied French fish has driven us out, while in the most of the South American and West Indian markets what between the heavy duties, and the impoverished condition of the people, due to the constantly recurring civil wars, it is impossible to dispose of our dry codfish at anything like a profit.

SALMON.

The salmon fishery of 1896 has been one of the best of recent years, salmon were everywhere abundant. The following table which gives the annual catch for the past 20 years shows very clearly the flourishing condition of the fishery :—

Year	Quantity lbs.
1877.....	873,553
1878.....	1,175,160
1879.....	903,856
1880.....	469,140
1881.....	364,065
1882.....	452,707
1883.....	489,975
1884.....	556,858
1885.....	652,098
1886.....	496,612
1887.....	638,321
1888.....	622,907
1889.....	556,817
1890.....	568,854
1891.....	638,077
1892.....	672,740
1893.....	658,280
1894.....	756,181
1895.....	569,136
1896.....	933,517
Total.....	12,818,854

By the above table it is shown that only once during the past 20 years has the catch of 1896 been exceeded, and that while from 1877 to 1886, the total catch amounted to 6,234,024 lbs. during the last 10 years from 1887 to 1896 it has amounted to 6,614,830 lbs. thus maintaining an even improved average. These figures are fairly accurate, and are certainly under rather than over the mark, they do not include the angler's catch, the returns of which are not regularly made to us. In connection with this, it should be borne in mind, that sport fishing for salmon has greatly increased, at least twice as many rods being fished now as we had in 1877. This condition of the salmon-fishery has been maintained in the face of a slight increase in the number of net fishing stations. During recent years we have succeeded in removing a great many nets from some of the overcrowded estuaries. This has been done in some rivers by cancelling, and not renewing, the stations of those who have left the coast, or in the event of the death of the holder of more than one license, the issuing of not more than one to his successor. In other rivers such as the Grand Cascapedia, Grand River and St. John's, the estuary nets have been bought out by the anglers, that is to say, by an arrangement between the net fisherman and the anglers, the former have agreed not to fish their stations, for which they continue to be licensed, and for so doing they are paid by the anglers an amount equal to the annual net yield of the station, the department agreeing not to issue any new licenses in estuaries where this arrangement is made. This seems to be a perfectly fair arrangement, and one that works well for all parties, under it the holder of the estuary license is fairly recouped for the loss of his fishing, the anglers gets a greater run of fish in the river, with the holder; of the outside net stations are making larger catches. There is no doubt that under this arrangement a larger number of breeding fish survive in the rivers, and in the rivers where it has been adopted the fishing has most decidedly improved.

Between Cape Whittle and Blanes Sablons, it was noticed that while there was a scarcity of large salmon there was a heavy run for small fish which passed through the ordinary 5-inch gill-net used on that part of the coast. By the above it will be seen that we are fairly holding the balance as regards the salmon-fishery, a most unusual occurrence as regards any fishery. I would therefore strongly urge especially as my connection with the gulf fishery has been closed, that no change be made in the present method of dealing with the fishery, that is, that the number of the estuary nets be everywhere kept down—that the arrangement under which anglers are encouraged to buy out estuary nets be continued, and that the number of salmon-net stations be nowhere increased beyond the present limit.

LOBSTERS.

The lobster fishery shows a slight increase over that of 1895—this is, however, entirely due to an increase in the number of traps fished; the following table shows this:—

	No. of traps fished.	No. of lbs. canned..
1895.....	88,036	1,602,492
1896.....	94,551	1,158,822
Increase in 1896.	6,515	156,330

The number of lobster canneries is steadily increasing and lobsters are being fished far off many parts of the coast which it was not considered profitable to fish in the early days of the industry. A number of new canneries will be put up during the coming Spring, along the south shore of the gulf, in that part of the county of Gaspé, west of Cap des Rosiers.

If it is at all desirable that the lobster should be preserved from extinction, the time has surely come when some active measures should be taken to greatly restrict the fishery. We absolutely control the market, as with the increased size limit now in force all along the New England coast, the canning of lobsters there has been practically prohibited. This being the case, I think we are fully justified in either increasing the size limit, and seeing that the rule was enforced, or in greatly restricting the amount of fishing.

There is an unlimited demand for canned lobsters, the price is steadily rising, lobsters are not canned anywhere outside of the Dominion. So that we furnish the sole supply, and have no outside competition to fear. Under these circumstances, and viewing the present exhausted condition of the fishery, the time has arrived when means should be taken to put a stop to the destructive methods now practised. If we greatly reduce the output, and insist on more care in the preparation of the canned article, the price will rise in proportion, and I cannot see that either cannery or fishermen will suffer by the restriction, while the future of the industry will be secured.

HERRING.

The catch of herring was a little better than in 1895. Spring herring were abundant all over the gulf, they were however only taken for bait or manure. A large trade was at one time carried on between several of our gulf ports and Boston in this cheap Spring herring, but the imposition of the duty on salted fish which followed the abrogation of the Reciprocity Treaty, at once put an end to it. At present the market for salted summer and Fall herring is confined to the province of Quebec, but were more care taken in the curing and barrelling of the fish, and a proper inspection insisted on, the demand for it would be increased and extended.

MACKEREL.

The catch of mackerel shows a still further falling off, the statistics giving us only 6,835 brls. as against 7,653 in 1895. Much disappointment was felt among the fishermen at this result, as from the presence in 1894 and 1895 all over the gulf of immense schools of young mackerel, a better fishery had been hoped for in 1896. Complaints continue to be made by the Magdalen Island fishermen that their hook and line fishery for mackerel is greatly injured by the immense fleets of gill-nets fished by foreign vessels all round the island. They suggest as a remedy that no mackerel gill-nets should be allowed to be fished between the 15th July and the 1st October.

SMELTS.

The smelt-fishery continues to increase, especially in the estuary of the Restigouche where a very extensive bag-net fishery, is prosecuted under the ice in January and February. This fishery which has only been introduced during recent years, gives employment to quite a number of men who would otherwise find it difficult to get employment during the Winter season. Sometimes enormous catches are made, instances being given of men clearing two hundred dollars after only a few days fishing. These are of course exceptional instances, but on the whole good wages are made. Smelt are found abundantly, in most of the north shore rivers, but at the season when they could be taken, navigation is closed and it is impossible to get the fish to market.

SEALS.

The return of the seal hunt shows that about the same number of skins was taken as in 1895. The great falling off in the value of the oil does not encourage our fishermen to prosecute the seal hunt at the ice in March and April as vigorously as they used to when the oil was worth more than double as much per gallon as it now is. As the vessels required for the ice work need to be specially built and fitted for it, it has followed that as they become worn out, or are lost, they are not replaced. Seals have undoubtedly increased in the Gulf and a number of vessels from Newfoundland made good fares last spring between Rich Point and the East end of Anticosti.

BAIT.

The bait fishes such as herring, capelin, squid and launce show no falling off; they may occasionally miss at one point, and be more than usually abundant at another, but on the whole it cannot be said that bait is not as plentiful as ever it was.

With some few exceptions, which have been duly reported by the local officers from time to time, the fishery laws and regulations have been well observed.

If having been decided that I am no longer to have charge of the gulf fisheries, I desire to tender my sincere thanks to all those, both fishery officers, fishermen, and others, who have during the past eighteen years done so much to make my work easy and pleasant. The condition of the gulf fisheries, and more especially of the salmon fishery with which our *regulations* have most to do, is the best evidence of the care and fairness with which these have been observed and administered.

SYNOPSIS OF THE REPORTS OF LOCAL OFFICERS,

BONAVENTURE COUNTY.—RESTIGOUCHE SUBDIVISION.

Overseer Verge reports a greatly increased catch of salmon. The figures being for 1895, 40,362 lbs., and for 1896, 82,291 lbs., or more than double. The fly-fishing on the upper waters of the Restigouche River was also exceptionally good.

There was also a considerable improvement in the smelt-fishery, the returns showing 739,630 lbs. compared with 577,558 lbs. in 1895. So far these enormous catches of smelt do not seem to have in any way affected the Spring run of spawning fish, as during the spawning season in the Spring smelt were actually more abundant than they have been for fifty years past. There can be no doubt that this condition is solely due to the prohibition of Spring fishing, at which season, until quite recently, farmers had been in the habit of taking large quantities for manure.

Mr. Verge favours allowing the fishermen to begin the smelt-fishing at an earlier date than the 1st of December. An extension at the end of the season he does not favour, as by this time smelts have fallen off in value, and the weather is getting so mild that many fish are lost or spoiled in transit. Neither dealer nor fisherman really benefit by the Spring extension.

The fishery regulations were generally well observed, with the exception of certain cases which were duly reported to the department.

CARLETON SUBDIVISION.

Overseer Dagneau reports the salmon catch as being one-third greater than that of 1895. Cod were scarce in the summer, but abundant in the fall. However, very little fishing was done, as late in the season when the fish were abundant, the weather was too rough to allow the boats to get out to the fishing grounds. No violations of the fishery regulations were reported.

BONAVENTURE SUBDIVISION.

Overseer Smith reports a decided improvement in the salmon fishery, the catch being the best of recent years. Lobster-fishing began during the first week of May. Three canneries were operated, and the pack was slightly greater than that of last year. Spring herring were abundant all along shore in the division. Cod-fishing was fair all through the season up to the last week in October, when the weather became too rough to continue fishing. The fishery regulations were well observed.

PORT DANIEL SUBDIVISION.

Overseer Ross reports the cod-fishery as showing an improvement over that of last season, but the prices received by the fishermen were much lower than they have been for years. Herring-fishing was about the same as usual. The lobster pack is slightly increased, but this is due to a fine fishing season and an increased number of traps. The salmon catch was about an average. The close seasons were well observed and no abuse of the fishing regulations were reported.

GASPÉ COUNTY.

GRAND RIVER SUBDIVISION.

Overseer Jones reports a slight increase in the catch of cod during the early part of the season the fishing was excellent, but towards the fall, owing to rough weather, the fishing fell off greatly. The lobster-fishery was not as good as in 1895,

and although the return shows a larger yield, this was due to a considerable increase in the number of traps. Salmon-fishing was better than in 1895, but the herring catch was not up to the average.

GASPÉ SUBDIVISION.

Overseer Annett reports all kinds of summer fishing as having been good. Cod shows an increase of 9,095 cwt., though owing to rough weather the fall fishing was a failure. Salmon net-fishing shows a large increase, being 62,648 lbs. in excess of that of 1895. Herring shows a falling off; this was due to the failure of the Fall fishing owing to rough weather. Lobster-fishing was almost exactly the same as that of 1895, but the number of traps was increased. Very few mackerel were caught, and very few were seen anywhere about the coast. Smelt-fishing was good, showing an increase of 11,757 lbs. Two parties were fined for illegal salmon-fishing; with this exception the regulations were well observed.

FOX RIVER SUBDIVISION.

Overseer Theriault presents no report concerning his subdivision, and it may be stated that the summer cod-fishery was good, but owing to the heavy weather in the Fall this fishery failed. Very little salmon netting is done in this subdivision as only one small station is fished. One lobster cannery fishing 500 traps was established at Fox River Cove; the catch was good and the lobsters of large size. This was the first season that any attempt to take lobsters, save for domestic use, was ever made west of Cape Gaspé. It is proposed to establish a number of canneries next year, as the fishermen report lobsters to be abundant.

MONT LOUIS SUBDIVISION.

Overseer Lemieux reports the Summer cod-fishing to have been about as usual, but during the Fall the fishing failed completely owing to bad weather. Herring were abundant all through the season. Salmon were more abundant than usual. Mackerel were not seen on the coast. White porpoises did not visit the coast to the same extent nor as often as usual; they have usually been blamed for driving the fish off, but their absence this season does not seem to have mended matters.

STE. ANNE DE MONTS SUBDIVISION.

Overseer Sasseville reports the cod-fishing to have been smaller than usual, though about the same number of men carried on the fishery. There is no doubt this fishery is failing in the river. Herring were very abundant, some 2,000 barrels having been put up. Salmon-fishing was a failure, only a few stations were fished, and at these, owing to heavy weather during the season of fishing in June, the nets were more often ashore than afloat. Fly fishing in the Ste. Anne's River was excellent, 350 salmon averaging 20 lbs. were landed with the rod. No mackerel were seen on the coast, and capelin were scarce. Fishery regulations were well observed.

MAGDALEN ISLANDS SUBDIVISION.

Overseer Chévrier reports that the sealing vessels at the ice in April did badly. Seals were also scarce on the inshore ice. The spring herring-fishery was poor at the opening of the season, owing to rough cold weather keeping the fish off shore; later, however, the fish came in. The local fishermen did not do as well as usual owing to the presence of a trap-net which caught fish all the time, and provided the cod-fishing vessels with the bait they wanted. Mackerel-fishing was not as good as usual. The general impression among the local fishermen is that the setting of such

large numbers of gill-nets round the islands from vessels has caused this decrease; they also believe that the practice of dressing the fish on the grounds is hurtful. Mr. Chevrier's opinion is that no mackerel gill-nets should be allowed in the water between the 15th of July and the 1st of October. The cod-fishery was better than last year. The lobster canning returns show an increased pack; this was due to a considerable increase in the number of canneries and the amount of gear fished. Mr. Chevrier reports that considerable illegal lobster canning was carried on in spite of all that the local guardians could do; many traps were destroyed. He states that the most effective way of stopping this fishing during the close season for lobsters, is by keeping a cutter on the station.

SAGUENAY COUNTY.

POINTE DE MONTS SUBDIVISION.

Overseer Comeau reports the fishing season as having been unfavourable, owing to the prevalence of high winds, chiefly from the north and north-west, which had the effect of driving the bait off shore, a scarcity of cod and herring naturally followed. The salmon catch was however remarkably good, the season of 1896 being one of the best on record, the exact figures showing that 30,758 were caught in 1895 and 77,638 lbs. in 1896, and these figures do not include the anglers catch. The weather was not in the fishermen's favour, and many days were lost to them owing to the damages sustained by the nets. Salmon were abundant in every river in the subdivision, the increased numbers in the pools could be easily noted. Mackerel were scarce and none were seen near shore. Immense numbers of white porpoises were seen at various times during the season, a few were shot but no regular hunt was made for them. The Winter seal hunt was good, the total number killed being above the average. Smelts were abundant, but owing to the want of communication during the season at which they could be taken—November—the catch is limited to the local requirements. Pearl fishing is being carried on to a considerable extent in some of the salmon rivers, and some regulations are required to control it, as the salmon are disturbed on the spawning beds, and in some cases the ova are raked over and destroyed. The pearls are found in the fresh water mussels which exist in all the streams. Angling for salmon and trout was good on all the rivers in the subdivision, the catches being above the average.

MOISIE SUBDIVISION.

Overseer Migneault reports that salmon-fishing began on the 20th of May and closed on the 23rd July. The catch was exceedingly abundant the returns showing a yield of 223,122 lbs., or an increase of 81,320 lbs. over the preceding year. Between the 15th June and the 9th July, 449 salmon were taken on the Moisie River with the fly, and when the anglers left fish were still rising freely. The sea shore salmon netters did poorly owing to the rough weather, as their nets were frequently washed ashore. Cod-fishing was poor—this was largely due to the fact that the capelin kept off shore, in fact both herring and capelin were forced to keep in deep water owing to the constant strong winds. As the cod-fishing in the Moisie Subdivision is carried on close inshore this absence of the main baits on the regular fishing grounds was necessarily followed by a poor fishery. The mackerel fishery was a complete failure, it has now been five seasons since any mackerel were seen on this part of the coast. Times are very hard on the coast owing to the failure of the cod-fishery.

MINGAN SUBDIVISION.

Overseer DuBerger reports the yield of the cod-fishery to be 8,850 cwt. short as compared with 1895, this is in part due to the fact that fewer boats from the south shore were engaged in the fishery. Owing to the failure of foreign markets the large fishing firms are not anxious to handle too much fish. Salmon net fishing was

excellent, 73,900 lbs. being taken as compared with 22,000 lbs. in 1895; there was also increase of 47 brls. in the salted catch. The Spring seal hunt, though a long way below the former average, shows for this year an increase of 1,230 skins, and 5,210 gallons of oil, over the yield for 1895. The catch of herring was a failure, this is due to the absence of the usual fall run of herring on the coasts of Labrador and Newfoundland, the vessels from Esquimaux Point which go down to the straits of Belle-Isle to prosecute the Fall herring-fishery returned with only 370 brls. in all. Mr. Chevrier is anxious that certain repairs should be made to the hut in which he lives at Mingan, the hut being owned by the department.

NATASHQUAN SUBDIVISION.

Overseer Gaudin reports the Spring seal-fishery as being only a medium one—the fishermen in the schooners reported the seals plentiful, but the ice conditions were such that they could not reach them. The salmon-fishery has been the best for the past 10 years. The improvement was in the catch made in the estuaries of the Natashquan and Agwanus rivers, the ordinary nets on the sea shore which are more exposed only made an average catch. The anglers on the Natashquan did well, 4 rods having killed 250 fish in about three weeks. Lobster canning was carried on in a small way by two movable canneries. The cod-fishery though late in beginning was exceedingly good, and lasted longer than usual, the catch was more than double that of 1895. The late beginning of the fishing was due to the fact that the capelin only struck in on the 23rd June. Herring were scarce throughout the season. The fishery laws were well observed and no fines imposed.

ST. AUGUSTIN SUBDIVISION.

Overseer LeGouvie furnishes no report. It may however be stated for this subdivision, that the cod were very unevenly distributed, being unusually abundant at the western end of the subdivision between Romaine and Harrington, the vessels fortunate enough to be on this part of the coast during the end of June and beginning of July did wonderfully well, many of them filling up and leaving for home after only a couple of weeks fishing. Off the eastern shores of the subdivision, the fishery was a failure, the cod passing down off shore, outside the reach of the fishermen. Salmon-fishing was a failure, it was remarked by the fishermen that there was an unusual run of small salmon, fish of only five or six pounds weight. These of course would not mesh in the regulation 5 or 6-inch mesh. There is a general feeling among the resident fishermen that the salmon-fishery is being ruined by the large number of cod traps which are being fished of recent years. The sedentary seal-fishing with nets was about an average. Herring were not abundant though a few good hauls were made at Mutton Bay and Meccatina.

BONNE ESPERANCE SUBDIVISION.

Mr. Whitely reports a poor salmon-fishery; the run began about the usual time 25th June, but mature fish were never plentiful. Here as in the subdivision to the west an unusual run of small salmon was observed, and reports from north on the outer Labrador say the same condition was noted there. Cod-fishing was fully up to the average, and east of boundary in the Straits of Belle-Isle they were unusually abundant. Capelin and launce were very abundant, and no difficulty was experienced at any time during the season in getting all the bait needed for fishing purposes. All the settlers are getting traps for cod-fishing, instead of seines, these latter being very little used at present. This change of appliance benefits the hooking, as the traps being sedentary, do not worry and disturb the fish as the cod seines did. Dry cod-fish met with a ready sale, and with the exception of the usual drones all the families in the subdivision are well off for the Winter, in fact many have a year's supply of provisions ahead.

I have the honour to be, sir,

Your obedient servant,

W. WAKEHAM.

SYNOPSIS OF FISHERY OFFICERS REPORTS IN THE PROVINCE OF QUEBEC (EXCLUSIVE OF THE GULF DIVISION) FOR 1896.

SOUTH SHORE, RIVER ST. LAWRENCE, FROM CAPE CHATTE TO POINT LEVIS.

Overseer Johnny Joncas reports cod and halibut-fishing on the south shore of the St. Lawrence a complete failure; in fact the catch returned was made on the north coast by some of their fishermen. The large numbers of belugas (white whales) prowling in that vicinity have no doubt a tendency to frighten the cod away. Herring and salmon fishing were satisfactory. Many salmon ascended the Matane River, but only fifty were caught by anglers. The fishery regulations were well observed. He suspected some parties of spearing salmon in the upper waters of Matane River, but could not secure proof of their guilt. The total value of the fisheries of Matane district are given at \$17,850, an increase of 50 per cent over that of last year.

Overseer L. E. Grondin states that salmon seemed scarce on that part of the south coast of the St. Lawrence. While sardines were not plentiful, herring was abundant and remained as late as November. Large quantities were taken to make up the deficiency in other species. Fishermen are reluctantly conforming to the regulation compelling them to have their weirs open during Sunday, but he reports progress in that respect. The fisheries yield of this district is valued at \$46,500, an increase of over 30 per cent over that of last year.

Overseer H. Martin reports a considerable improvement in the yield of salmon, shad, herring, sturgeon, and eels, and a decline in sardines and coarse fish, as compared with the previous results. The increase of nearly four thousand barrels of herring is specially noticeable. The fishery laws were generally well observed, and no infractions came under his notice. The total value of the catch of fish is computed at \$35,500, an increase of \$11,000 over that of the previous one.

Overseer Nap. Levesque states that the returns of the fisheries under his charge fell short of the average yield. This he ascribes to the stormy weather prevailing during the fishery season. About one third of the catch is consumed for local use, and the balance disposed of on the Quebec markets. The only violation reported was that of two parties caught fishing with nets at River du Loup without license.

Overseer X. Pelletier states that notwithstanding the catch of fish equals the previous one, there is no doubt that fish are generally on the decline. Salmon, shad and bar-fish formerly plentiful are now seldom seen on this coast. Sturgeon are getting scarcer every year. Sardines were rather plentiful especially at Kamouraska and St. André, where a sardine factory was in operation during the Summer, putting up nearly a thousand cases of a hundred boxes each. Eels are still abundant, and when the season is favorable large catches are effected, especially after a few days of strong north-east winds, while with high temperature and during calm weather, few are caught. The whole catch is valued at \$29,500, about the same as last year.

Overseer O. V. Beaubien reports the reappearance of shad in their waters, 50,000 lbs. being taken. As the fall was windy, the catch of eels was very good. Seining for smelts has been almost entirely abandoned. Excepting about 10 per cent used for local consumption, the catch is disposed of on the markets of Quebec City. The value of these fisheries is reckoned at \$26,430.

NORTH SHORE, RIVER ST. LAWRENCE, FROM QUEBEC TO BERSIMIS.

Overseer L. P. Huot, states that salmon-fishing was almost nil this summer. Shad shows signs of improvement, but bar, whitefish and mackerel gave the best returns. Although the catch of eels seems satisfactory it falls short of that of the previous season, which was an exceptional year. Smelts are gradually decreasing. The whole catch, valued at \$17,000, is disposed of on the Quebec market.

Overseer U. Bhreur makes no report, but returns a smaller catch than last year.

Overseer L. N. Catellier, of the Saguenay District, reports an increase of nearly 100 per cent over the previous catch of fish. It is true that the year 1895 had fallen short on account of rough weather damaging the salmon stands on three different occasions. The following figures seem to prove a steady increase for several years past:

	Lbs. of salmon.
1892.....	48,000
1893.....	68,780
1894.....	82,400
1895 ...	76,680
1896.....	146,820

This beneficial result should be at least partly credited to the distribution of fry from the Tadoussac Hatchery. It is so admitted by most of the fishermen and anglers. The different tributaries of the famous Saguenay are all reported well stocked with parent salmon. All the salmon caught in this district are shipped to Montreal and Quebec, very few being used for home consumption.

The brush weirs or fisheries are generally set in this district, for domestic use, catching mostly herring, sardines, caplin, and occasionally a few salmon. No bar-fish are ever caught in these weirs as on the south side of the St. Lawrence. The fishery laws were well observed on the St. Lawrence shore, but much illegal fishing was attempted on the Saguenay River with floating nets by proprietors of schooners and other parties roving about in small boats. As many as fourteen such illegal nets were confiscated by the patrolman guardian Wm. Mannings, but he could not detect their owners.

Mr. Catellier recommends the use of a small steam launch to properly patrol the Saguenay district, which could also be utilized for the distribution of fry and thus save a considerable amount. The total yield of this district is valued at \$32,000, an increase of \$5,000 over 1895.

INLAND DISTRICTS.

SHERBROOKE AND MEGANTIC.

Overseer John McCaw of Sherbrooke and vicinity states that Lake Aylmer, a large sheet of water in the county of Wolfe, at one time swarming with bass, doré, maskinongé, pike and whitefish, became almost depleted owing to improper fish-ways, illegal netting and even explosive materials, but it is now giving signs of improvement. The use of nets have been of late years somewhat checked, as a great many of them have been seized and destroyed by this officer, who says: Most of these poachers are so miserably poor that they have no money to pay the fines, and that he has been lenient with them on that account as, did he send them to jail, their families would suffer more than the culprits. He has reasoned with some of them, a few

desisted from their nefarious practices, others promised to amend but did not do so, on the contrary repaid his kindness by destroying a splendid boat which he had to guard the lake.

River St. Francis is fed by this lake and if the dams thereon were provided with efficient fish-passes, it would be very beneficial to the lake. At one time the St. Francis was a favourite resort for salmon to spawn. Residents on the river banks between Richmond and Lake Aylmer complain that since the construction of dams, they hardly catch anything.

Lake Massawippi, in the county of Stanstead, is also a fine sheet of water, frequented by lunge, trout and whitefish, and a favourite summer resort. This lake has also been overfished, but lately a club has been organized and its members are endeavouring to protect it and restore it to its former standing.

Little Magog Lake, properly an enlargement of the Magog River, about eight miles from Sherbrooke is also becoming a summer resort. A fishing club will be organized shortly to protect its fisheries.

Brompton Lake, between the townships of Brompton and Orford, is one of the finest sporting waters in the Eastern Townships. Parties from the vicinity have been netting on the very spawning beds and have taken tons of fish therefrom. Even explosive materials have been used by poachers. He has caught two of them in the act and he hopes the lesson taught them will be beneficial.

Little Brompton Lake, a chain of ponds containing lunge and speckled trout is worthy of protection. Here also netting is carried on by well-to-do people of whom better conduct should be expected. A great many complain loudly of illegalities, but very few are willing to specify or lay the proper evidence to implicate any one in particular. The lakes in Orford and Brompton townships are alone sufficient to supply the whole of the Eastern Townships with fish food. The large amounts of money spent every season by sportsmen and tourists should suffice to interest the neighbouring community in maintaining the fisheries.

Overseer Guy Carr of the county of Compton, estimated the catch of fish at about 25,000 lbs., half of which is shipped away and the balance used for home consumption. The close seasons were fairly well observed, but he finds it almost impossible to check illegal fishing entirely. The fact that he confiscated seventeen gill-nets, one boat, and some spears, in addition to imposing a fine proves the activity of this officer. There are eight fishways all kept in good repair and order by interested parties in this division. The Sawdust Act is much abused here. Some streams are not worth protecting now as the lumber industry might suffer, but the tributaries of Massawippi Lake at least should not be contaminated by sawdust or rubbish.

MAGOG AND BROME DIVISION.

Overseer N. A. Beach who protects the east side of Lake Memphremagog reports that the catch with hook and line was an average one. This lake has become overstocked with the so-called "shad," suckers, eels, etc., since the prohibition of nets and seines, ten years ago. Resident farmers and others complain of being deprived of the privilege of using seines on certain grounds to catch these coarse fish which prey on the ova of the finer grades. Netting being allowed on the Vermont side of the lake, the Canadians naturally feel annoyed at our protecting fish for our neighbours. Some poaching was attempted and this officer seized several seines and spears.

MISSISQUOI BAY.

Overseer P. E. Luke says there seems to be considerable falling off in the catch of doré and whitefish compared with other years when seines were permitted. During the close season some of the Vermont fishermen had the narrow channel from Lake Champlain to Missisquoi Bay filled with pound, hoop and gill-nets completely

blocking it. These nets were found and confiscated by one of their officers and the licenses of the culprits cancelled. Nine-tenths of the catch of this division is shipped to New York.

RICHELIEU RIVER.

Overseer James Finley reports that most of the catch consisting chiefly of eels and coarse fish is shipped to United States. Considerable illegal fishing was carried on, as twenty-one seizures were effected by this officer.

Overseer J. O. Dion states that the water of the Richelieu River remained higher than usual, which allowed the fish to ascend the small streams to spawn. The young fry were afterwards noticed in immense quantities. Could this be continued for a few years these waters would become stocked as heretofore. Some of the fishermen, notably at St. Ours, had only a few days seining. Eels, the staple fish of this division, yielded 18,150 lbs., which are mostly shipped to United States; nearly every other kind of fish, excepting doré, shows a surplus over last year, especially pike and perch. Few infractions of the fishery laws came to his notice. A couple of individuals were discovered fishing with night lines and seines without licenses, and the respective cases duly reported.

BEAUHARNOIS DIVISION.

Overseer John Kelly reports bass, pickerel and maskinongé as more plentiful than last year, owing no doubt to the curtailment of the use of the seine and nets. Should this prohibition last a few years more, fish would again become abundant in these waters, otherwise the time will soon come when no fish will be caught with rod and line. The close season was well observed. The fishways are all kept in good repairs, and the sawdust regulations also attended to.

MONTREAL TO VERCHÈRES DIVISION.

Overseers John Morris and G. Magnan make returns of an increased catch of fish valued at \$9,700, mostly disposed of on the Montreal markets, but these officers make no remarks.

RICHELIEU COUNTY AND ST. FRANCIS RIVER.

Overseer J. F. Picotin reports fishing poor, owing to the high water in River St. Francis. The whole catch, about 16,000 lbs. of fish, is all used for local consumption. A dam was built this year across the St. Francis above the falls, but a good fish pass was placed therein. Besides a few attempts at angling during the close time, no serious complaint reached this officer.

YAMASKA DISTRICT.

Overseer J. Charbonneau states that fishing was satisfactory for the short time devoted to it. Hook and line fishermen fared well, especially in the fall months. It would be the most profitable kind of fishing if the fish were properly protected as it is the least expensive.

Overseer D. Shooner made no report.

NICOLET DIVISION.

Overseer G. Boisvert returns an increased catch of fish consisting chiefly of shad, eels, perch, catfish and other coarse fish valued at \$4,250. More than $\frac{2}{3}$ of this yield are sold on Three Rivers markets, and the balance used at home. He experiences

great difficulty in obtaining the individual catch from fishermen as most of them are under the impression that if the yield is small the license fees will be abolished. The principal abuse in his district is the use in secluded spots of the small meshed seine for the alleged purpose of catching bait. An officer sometimes sees these illegal seines drying on the owner's premises where he has no right to seize them. He also judiciously recommends that every licensed fishing implement should bear the same number as the license. This would enable the officer to detect illegal gear at a glance.

THREE RIVERS DIVISION.

Overseer C. Vadeboncœur states how difficult it is to get at the exact figures of the catch of fish in his district. For instance trout-fishing is carried on the numerous lakes of St. Maurice County by different residents and others who ship their catch to different localities. The same with tomcod-fishing through the ice on the St. Lawrence by residents in the vicinity of Three Rivers who do not require boats and are not ranked as fishermen.

BERTHIER, MASKINONGÉ AND MONTCALM DIVISION.

Overseer Gabriel Caron reports a slight falling off in the yield of fish as compared with previous years. The close seasons are well observed enough. Excessive netting everywhere and at all times is the worst abuse complained of. These nets not only destroy the fish eggs by moving them, but capture large quantities of immature fish which are disposed of to unscrupulous grocers, and thus a good law having for its object for the protection of fish is evaded.

TERREBONNE DIVISION.

Overseer Joseph Lauzon states that the people are beginning to realize that the fishery regulations are enacted and enforced for their benefit. The law was better respected this year than before. Anglers generally met with fair success. No violations are reported.

OTTAWA RIVER DIVISION

Overseer P. D. Chenier who has recently been appointed reports fish about as plentiful as last year, but returns a greatly decreased catch owing no doubt to a want of proper data. Fishermen complain of sawdust and rubbish being allowed to pollute the Ottawa River. When it is windy their nets become full of this debris and are thereby injured if not ruined. Mr. Chenier has been informed that the passage or entrance to Campbell's Bay becomes so shallow that ice forms almost solid to the bottom, and causes more destruction to fish life every spring than the whole catch for one year. The waters of said bay become so polluted that cattle refuse to drink it, and if holes are made through the ice an obnoxious odour emanates from them attributed to putrid fish. The passage from the bay to the river could be deepened at a comparatively small cost and thus a free outlet to fish would be established and this cause of complaint be removed. He has no contravention of the fishery laws to report.

PROVINCE OF

RETURN showing the Number and Value of Vessels and Boats engaged in the Fish
of Men employed in the Fishing Industry of the County of

RESTIGOUCHE SUBDIVISION

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING MATERIAL.						
		Vessels.			Boats.			Gill-Nets.		Smelt Nets.		Seines.		Salmon, fresh, in ice.
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Fathoms.	Value.	Number.	Value.	Number.	Fathoms.	Value.
	<i>Bonaventure County.</i>			\$			\$		\$		\$			\$
1	Head of Tide to Maguasha.					23	315	203	5050	5050	90	5400		82291

CARLETON SUBDIVISION

1	Maguasha and Nouvelle.					50	700	120	9000	800		7	210	80	16400
2	Carleton.					90	900	180	26000	1400		20	700	225	29700
3	Maria.					110	1300	240	48000	2100		10	350	120	36500
	Total.					250	2900	540	83000	4300		37	1260	425	82600

BONAVENTURE SUBDIVISION

1	New Richmond.					16	120	10	1200	600					
2	Black Capes.					20	140	18	2860	1740					18000
3	Capelin.					135	1600	125	6800	2760		12	300	120	
4	Bonaventure.					235	3250	280	10500	5250		56	1220	784	7000
5	New Carlisle.					35	300	35	1060	420		28	625	500	900
6	Paspebiac.					120	2100	280	1600	800		22	550	425	
	Total.					561	7510	748	24020	11570		118	2695	1829	25900

PORT DANIEL SUBDIVISION

1	Nouvelle.					40	1500	118	542	565		8	200	150	1500
2	Hopetown.					56	1200	114	980	595		8	210	260	1800
3	Shegawake.					67	680	95	880	394		2	48	60	
4	Port Daniel.					180	3500	276	3100	1905		19	430	510	41558
5	Anse aux Gascons.					183	4860	290	3600	2390		20	550	530	8726
	Total.					526	11740	893	9102	5849		57	1438	1510	53584

TOTAL FOR THE COUNTY

1	Restigouche Subdivision.	..	....	....	..	23	345	203	5050	5050	90	5400	..	....	..	82291
2	Carleton do	..	....	....	..	250	2900	540	83000	4300	....	....	37	1260	425	82600
3	Bonaventure do	..	....	....	..	561	7510	748	24020	11570	....	....	118	2695	1829	25900
4	Port Daniel do	..	....	....	..	526	11740	893	9102	5849	....	....	57	1438	1510	53584
Total.....						1360	22495	2384	121172	26769	90	5400	212	5393	3764	244375

QUEBEC—Gulf Division.

eries, Fishing Materials, and the Kinds and Quantities of Fish, as well as the Number Bonaventure, Province of Quebec, for the Year 1896.

(Head of the Tide in the Restigouche to Maguasha).

KINDS OF FISH.														FISH PRODUCTS.			TOTAL VALUE.		Number.
Herring, salted, brls.	Herring, smoked, lbs.	Mackerel, salted, brls.	Lobsters, preserved, in cans, lbs.	Lobsters, alive or fresh, tons.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, cwt.	Trout, lbs.	Smelts, lbs.	Clams, brls.	Eels, brls.	Squid, brls.	Tomcod or frost fish, lbs.	Coarse and mixed fish, brls.	Fish oils, galls.	Fish used as bait, brls.	Fish used as manure, brls.	% cts.	
..	.....	..	2500	.....	.....	.....	.....	3000	238843	.....	15	..	60000	.....	.....	.....	.....	32,200	35 1

(Maguasha to Grand Cascapédia River).

100	1200	1	.....	.....	15	2	5	500	.....	10	6	...	1000	10	15	18	700	4,496	00	1
400	9500	5	2544	1	8	1	2	.....	.....	8	10	...	1200	15	10	25	1350	9,445	66	2
600	8000	10	.....	3	25	5	7	200	.....	.....	90	...	3000	20	60	50	725	12,303	50	3
1100	18700	16	2544	4	48	8	14	700	.....	18	106	...	5200	45	85	93	2775	26,245	16	

(Big Cascapedia to Paspebiac Point).

60	2000	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	2	500	569	00	1
70	4500	...	.....	.....	9	.....	.....	.....	.....	5	.....	.....	.....	.....	12	3	800	4,479	80	2
800	6000	22096	.....	1200	.....	.....	.....	.....	.....	12	.....	.....	.....	.....	900	275	7000	16,545	94	3
1200	7000	3408	.....	2000	6	10	.....	.....	.....	130	.....	.....	.....	.....	1500	375	8000	22,324	62	4
150	3500	.....	.....	200	.....	.....	.....	.....	.....	12	.....	.....	.....	.....	150	60	4000	4,035	00	5
500	5500	.....	.....	3900	8	100	.....	.....	.....	250	.....	40	.....	.....	2250	525	1500	20,137	50	6
2780	28500	25504	.....	6409	14	110	.....	.....	.....	499	.....	40	.....	.....	4827	1240	21800	68,091	86	

(Paspebiac Point to Point Macquereau).

110	.....	35280	.....	295	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	380	270	120	7,678	70	1
330	.....	.....	.....	290	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	195	320	230	3,823	00	2
310	.....	13488	.....	670	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	410	610	140	7,447	32	3
370	.....	36902	.....	3280	.....	.....	.....	50000	100	.....	.....	.....	.....	.....	850	987	695	35,070	88	4
470	.....	14610	.....	2879	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1350	1166	450	21,375	10	5
1590	.....	100280	.....	7414	.....	.....	.....	50000	100	.....	.....	.....	.....	.....	3185	3353	1635	75,395	00	

OF BONAVENTURE.

1100	18700	16	2500	.....	.....	.....	.....	3000	238843	.....	15	...	60000	.....	.....	.....	.....	32,200	35	1
2780	28500	25504	4	48	8	14	700	.....	.....	18	106	...	5200	45	85	93	2775	26,245	16	2
1590	.....	100280	.....	7414	.....	.....	.....	50000	100	.....	.....	.....	.....	.....	3185	3353	1635	68,091	86	3
5470	47200	16	130828	4	13871	22	124	3700	288843	527	121	40	65200	45	8097	4686	26210	201,932	37	4

RETURN showing the Number and Value of Vessels and Boats engaged in the

County

GRAND RIVER SUBDIVISION

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING MATERIAL.					
		Vessels.				Boats.		Gill-Nets.		Seines.			
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Fathoms.	Value.	Number.	Fathoms.	Value.	
	<i>Gaspé County.</i>			\$			\$		\$			\$	
1	Newport.					152	6500	350	5900	2500	8	230	140
2	Pabos.					40	2017	119	1188	640	6	130	115
3	Little River (West).					16	800	45	640	220	4	120	85
4	Grand River.					79	4400	193	2850	1300	5	150	145
5	Little River (East).					55	1650	115	2200	1100	2	50	60
6	Cape Cove.					102	5250	204	4640	2080	7	240	220
7	Percé and Bonaventure Island.					172	5400	342	6380	2260	3	70	90
8	Corner of Beach.	1	67	1000	6	15	750	30	1500	1000	8	350	300
	Totals.	1	67	1000	6	631	26767	1398	25298	11100	43	1340	1155

GASPÉ SUBDIVISION

1	Barachois.					160	7100	182	1800	1680	11	400	350
2	Malbaie.					57	1800	72	1210	600	3	84	100
3	Point St. Peter.					67	1600	92	2220	700	4	112	150
4	Chien Blanc.					67	1550	76	1000	550	3	75	75
5	Seal Cove.					63	1500	59	950	520			
6	Douglstown.					90	2900	140	1780	1140	8	240	128
7	Sandy Beach.					30	720	38	2100	2000			
8	Gaspé, North and South.					42	450	46	3264	2400	24	960	960
9	Peninsula.					18	350	29	1960	1650			
10	Cape Ozo.					30	380	40	1500	1200	1	20	6
11	Little Gaspé.					16	250	16	394	270			
12	Grande Grève to Ship Head.					70	1470	73	1720	1070	7	180	195
13	Cape des Rosiers.					62	1150	84	900	270	3	60	50
	Totals.					772	21220	947	20798	14050	64	2131	2014

FOX RIVER SUBDIVISION

1	Anse à Louise and Jersey Cove.					120	3300	129	3160	1030	3	100	75
2	Anse à Grisfonds.					106	2550	107	2550	800	2	80	75
3	Fox River.					215	5800	226	5500	1950	5	190	175
4	Little Cape.					50	900	54	1300	420	1	30	30
5	Echourie and Big Cove.					60	970	63	1050	580			
6	Pointe Jaune and Anse à Valeau.					29	500	30	550	250	1	40	30
	Totals.					580	14020	609	14110	5030	12	440	385

Fisheries, Fishing Materials, &c., in the Province of Quebec—Continued.

of Gaspé.

(Point Maquereau to Barachois, Malbaie.)

KINDS OF FISH.										FISH PRODUCTS.				TOTAL VALUE.		Number.
Salmon, fresh, in ice, lbs.	Herring, salted, brls.	Herring, fresh or frozen, lbs.	Herring, smoked, lbs.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Cod tongues and sounds, brls.	Haddock, cwt.	Halibut, lbs.	Smelts, lbs.	Squid, brls.	Fish oils, galls.	Fish used as bait, brls.	Fish used as manure, brls.			
4700	185			11040	7200		145		4000	200	4800	1640		41,605	60	1
17750	72				2625			200	9000	150	2350	466		18,395	50	2
	20		250	21248	1000					100	1000	200		8,669	72	3
5800	122		100	5408	7400	12	55	200	17000	500	5300	1000		42,570	62	4
					3500					100	1000	250		16,925	00	5
1100	200		1000	19200	12200		50	2300		300	8350	1800		66,373	00	6
	192		1030	13348	15300		71	2400		400	11550	2000		81,311	82	7
20325	15			8479	1100			300		50	900	180		11,129	56	8
49675	806		2380	78723	50325	12	321	5400	30000	1800	35250	7536	....	286,980	82	

(Barachois, Malbaie, to Cap des Rosiers.)

3514	100				9000				1000		4000	1000		44,802	80	1
700	75			25100	10000						5000	1200		52,791	50	2
250	50				2300						1100	900		12,415	00	3
642	50			8304	2500						1200	800		14,445	96	4
3054	50			24624	1100						530	180		9,715	16	5
4318	100				1950						760	380		10,962	60	6
23040	40				60						30	10		5,085	00	7
43147	6								107202					14,016	50	8
22230	20				150						75	20		5,271	00	9
8640	30			3168	280						120	80		3,734	52	10
2300	20				130						75	70		1,270	00	11
7336	120				2000						750	400		11,907	20	12
...	150				1000						600	200		6,715	00	13
119171	811			61196	30470				108202		14240	5240		192,132	24	

(Cap des Rosiers to Fame Point.)

...	370				3500	35	37	6600		90	3000	725	250	21,327	00	1
750	300	12000			3000	25	25	20000		80	2000	600	130	19,532	50	2
...	720			17760	5650	50	65	36000		180	4000	1200	800	39,998	90	3
...	200				1900	15	20	9000		40	1250	350	230	11,870	00	4
...	250				1900	18	20	15500		46	1250	550	300	13,134	00	5
...	120				1000	6	10	8000		25	750	250	220	6,820	00	6
750	1960	12000		17760	16950	149	177	95100		461	12250	3675	1930	112,692	40	

RETURN showing the Number and Value of Vessels, Boats and

County of

MONT LOUIS SUBDIVISION

DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING MATERIAL.						Salmon, salted, brls.	Salmon, fresh, in ice, lbs.		
	Vessels.			Boats.			Gill-Nets.		Trap-Nets.		Seines.					
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Number.	Value.	Number.			Fathoms.	Value.
			\$		\$			\$		\$		\$				
<i>Gaspé County.</i>																
Grand Etang and Pointe Sèche	66	1000	68	1870	850							2	80	50	3	
Big and Little Chlorydorme...	57	850	52	1675	875											1900
Petite Anse and Frigate Point.	58	560	50	1150	515											
Grand and Little Vallée...	68	1140	74	1500	900							1	30	60	2	700
Magdalen River	20	260	26	500	200											3900
Manche d'Epée and Gros Mâle	41	305	53	655	190										4	100
Anse Pleureuse and Mont Louis	60	700	67	1075	480							2	75	50		3900
Rivière à Pierre	11	75	12	200	75											
Total	381	4890	402	8625	4085							5	185	160	9	10500

STE. ANNE DES MONTS

Glaude River to Martin River.	20	345	40	685	240	1	100	200	10	1600				
Ste. Anne	58	732	116	1334	695				3	6300				
Cape Chatte	37	992	74	1039	576	1	40	90						
Total	115	2069	230	3058	1511	2	140	290	13	1700				

MAGDALEN

Grosse Isle, Old Harry and Grand Entry	83	2500	312	910	760	3	1000	3	240	235				
Little Brig and Grand Etang	81	3060	324	17818	14050									
Bryon Island	100	4000	350	1100	1000									
Wolf Point, South Beach and Low Point	61	1830	235	335	400	1	175							
House Harbour	8	360	15000	80	3	150	10	445	400	1	300			
Grindstone	3	150	11	220	200									
Hospital and Etang du Nord	110	4900	402	1320	1200			3	250	450				
Amherst and Entry Islands	160	6350	558	35920	30660			10	1600	2500				
Total	12	510	18000	108	601	22940	2202	40250	34620	5	1475	16	2090	3185

TOTAL FOR THE

Grand River Subdivision	1	67	1000	6	631	26767	1398	25298	11100	43	1340	1155	49675	
Gaspé do					772	21220	947	17818	14050	64	2131	2014	119171	
Fox River do					580	14020	609	14110	5030	12	440	385	750	
Magdalen River do					381	4690	402	8625	4085	5	185	160	10500	
Ste. Anne do					115	2069	230	3058	1511	2	140	290	13	7900
Magdalen Islands do	12	510	18000	108	601	22940	2202	40250	34620	5	1475	16	2090	3185
Total	13	577	19000	114	3080	91706	5788	109159	70396	5	1475	142	6326	7189

Fishing Material, &c., Province of Quebec—Continued.

Gaspé—Concluded.

(Cape Fame to Glaude River).

KINDS OF FISH.													FISH PRODUCTS.				TOTAL VALUE.	
Herring, salted, brls.	Herring, fresh or frozen, lbs.	Herring, smoked, lbs.	Mackerel, salted, brls.	Lobsters, preserved, in cans, lbs.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Clams, brls.	Fels, brls.	Squid, brls.	Fish oils, galls.	Seal skins, number.	Fish used as bait, brls.		Fish used as manure, brls.
100	75	90	380	100	225	210	40	1220										\$ cts.
.....	1650	2	.....	.....	2900	.....	.....	.....	.....	1000	.....	500	30	9,398 00
.....	950	2	.....	.....	1500	.....	.....	.....	.....	500	.....	250	38	5,766 50
.....	650	2	.....	.....	4600	.....	.....	.....	.....	400	.....	200	20	4,280 00
.....	1300	2	800	.....	4000	.....	.....	.....	.....	850	.....	450	300	9,407 00
.....	250	.....	.....	.....	400	.....	.....	.....	.....	100	.....	20	100	2,515 00
.....	325	2	.....	.....	1400	.....	.....	.....	.....	150	.....	25	40	2,836 50
.....	725	2	.....	.....	3300	.....	.....	.....	.....	500	.....	250	100	5,962 50
.....	150	.....	.....	.....	600	.....	.....	.....	.....	80	.....	20	20	987 00
1220	6000	14	800	18700	.....	.....	.....	.....	.....	3580	...	1715	648	41,152 50

(Glaude River to Cape Chatte).

235	590	880	.....	.....	315	.....	.....	200	250	.....	.....	.....	.....	320	.....	63	54	3,249 50
.....	.....	.....	.....	.....	280	.....	.....	400	750	.....	.....	.....	.....	290	.....	56	126	5,601 00
.....	.....	.....	.....	.....	70	.....	.....	200	.....	.....	.....	.....	.....	215	.....	13	120	4,460 50
1705	.....	.....	.....	.....	665	.....	.....	800	1000	.....	.....	.....	.....	825	.....	132	300	13,311 00

ISLANDS.

5080	.....	950	291117	.....	.....	.....	.....	.....	.....	.....	10	21	.....	3390	1130	3200	.....	84,744 88
150	.....	850	7680	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	300	.....	14,100 20
900	.....	1020	82692	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1500	500	900	.....	32,481 88
3300	.....	615	105670	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	255	50	1500	.....	41,818 30
1400	.....	25	.....	.....	.....	50	.....	.....	.....	.....	.....	.....	.....	3610	1200	100	.....	9,969 00
1100	.....	.....	45408	.....	.....	350	.....	.....	.....	.....	.....	.....	.....	900	250	800	.....	14,754 62
2900	.....	1580	104264	.....	.....	1255	.....	.....	.....	.....	110	75	.....	2250	400	1675	.....	60,604 46
2145	.....	1778	111244	.....	.....	3087	.....	300	.....	.....	175	100	.....	4800	1100	1660	.....	72,720 16
16975	.....	6818	748075	.....	4987	.....	300	.....	.....	.....	300	196	.....	16705	4630	10135	.....	331,193 50

COUNTY OF GASPE.

806	.....	2380	.....	78723	50325	12	321	.....	5400	30000	.....	.....	1800	35250	.....	7536	.....	286,980 82
811	.....	.....	.....	61196	30470	.....	.....	.....	.....	108202	.....	.....	.....	14240	.....	5240	.....	192,132 24
1960	12000	.....	.....	17760	16950	149	177	.....	95100	.....	.....	.....	461	12250	.....	3675	1930	112,692 40
1220	.....	.....	.....	.....	6000	14	.....	800	18700	.....	.....	.....	.....	3580	.....	1715	648	41,152 50
1705	.....	.....	.....	.....	665	.....	.....	800	1000	.....	.....	.....	.....	825	.....	132	300	13,311 00
16975	.....	6818	748075	.....	4987	.....	300	.....	.....	.....	300	196	.....	16705	4630	10135	.....	331,193 50
23477	12000	2380	6818	905754	109397	175	798	1600	120200	138202	300	196	2261	82850	4630	28433	2878	977,462 46

RETURN showing the Number and Value of Vessels and Boats engaged in the
County of
GODBOUT SUBDIVISION

DISTRICTS.	FISHING VESSELS AND BOATS.							FISHING MATERIAL.							Salmon, salted, brls.
	Vessels.				Boats.			Gill-Nets.		Trap-Nets.		Seines.			
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Number.	Value.	Number.	Fathoms.	Value.	
		\$	\$			\$		\$	\$	\$	\$				
<i>Saguenay County.</i>															
Manicouagan to Jambons	3	60	900	8	270	5400	223	6500	6500	1	200	9	500	500	10

MOISIE SUBDIVISION

Jambons and Ste. Marguerite	2	48	1000	5	11	540	21	1475	1220	..	..	2	207	350	..
Seven Islands.....	1	53	1200	4	35	2250	66	1300	800	..	..	4	140	190	..
Moisie and Pigou.....	1	13	250	4	32	1600	64	5530	4780	..	..	6	215	320	..
Totals	4	114	2450	13	78	4390	151	8305	6800	..	..	12	562	860	..

MINGAN SUBDIVISION

River aux Grains and Chaloupe	1	12	300	2	20	1150	45	..	..	..	..	3	96	200	..
Sheldrake .....	..	..	..	..	52	2050	87	500	300	2	600	5	240	275	4
Thunder River.....	1	60	1000	4	55	2200	130	500	300	2	600	2	150	160	16
Dock Ridge Point and Jupitagan.....	..	..	..	..	56	2480	173	350	200	..	..	4	130	205	15
Magpie .....	..	..	..	..	89	4450	175	300	150	..	..	3	95	150	..
St. Johns River.....	..	..	..	..	85	4500	250	1500	1500	..	..	5	150	180	..
Long Point, Mingan and Romaine .....	..	..	..	..	26	1000	61	900	750	..	..	5	150	180	52
Esquimaux.....	13	635	7800	71	100	1500	250	400	200	3	800	15	1000	750	..
La Corneille .....	..	..	..	..	2	75	2	200	100	..	..	..	..	..	23
Totals	15	707	9100	77	485	19405	1173	4650	3500	7	2000	42	2011	2100	110

NATASHQUAN SUBDIVISION

Watsheeshoo, Nabisippi and Agwanus ..	..	..	..	..	28	1036	60	850	275	..	..	4	150	75	59
Ile à Michon .....	..	..	..	..	1	45	1	100	50	..	..	..	..	..	9
Natashquan	4	88	2000	22	35	1950	85	2000	595	..	..	5	225	250	23
Kegashka to Coacoachoo.....	..	..	..	..	15	750	20	1300	650	..	..	3	120	60	23
Totals	4	88	2000	22	79	3781	166	4250	1570	..	..	12	495	385	114

ST. AUGUSTIN SUBDIVISION

St. Mary's Islands and Wolf Bay.....	..	..	..	..	10	400	14	750	400	..	..	2	80	40	4
Harrington .....	..	..	..	..	40	1600	60	800	400	6	1200	4	160	100	4
Whale Head West.....	..	..	..	..	35	1400	55	700	350	5	1000	3	300	300	10
Mutton Bay .....	..	..	..	..	50	2000	75	800	500	7	1400	3	250	200	12
Meccatina .....	..	..	..	..	30	1200	40	2000	2000	4	800	3	250	200	8
St. Augustin and Whale Head East.....	..	..	..	..	25	1000	50	750	400	4	800	1	40	40	6
L'anse à Portage et Canso .....	..	..	..	..	6	240	10	500	200	..	..	..	..	..	6
Chicatica .....	..	..	..	..	3	100	5	200	100	1	100	1	40	20	..
Totals .....	..	..	..	..	199	7940	309	6500	4350	27	5300	17	1120	900	50

Fisheries, Fishing Materials, &c., in the Province of Quebec—Continued.

Saguenay.

(Manicouagan to Jambons).

KINDS OF FISH.														FISH PRODUCTS.				TOTAL VALUE.
Salmon, fresh, in ice, lbs.	Herring, salted, brls.	Herring, fresh or frozen, lbs.	Herring, smoked, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Cod tongues and sounds, brls.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Clams, brls.	Squid, brls.	Coarse and mixed fish, brls.	Fish oils, galls.	Seal skin, No.	Fish used as bait, brls.	Fish used as manure, brls.	
77624	897	28000	1500	1	2256	1849	8	2400	4890	4600	...	20	35	4809	971	192	176	\$ cts.
																		33,418 99

(Jambons to Pigou).

7248	63	...	...	...	...	225	...	300	1100	...	50	...	15	190	22	90	...	3,419 10
20814	52	...	...	...	...	800	...	...	2202	...	72	...	...	845	70	232	...	9,350 50
195060	...	...	...	...	...	745	4	1000	15500	...	50	...	...	894	96	328	...	45,274 10
223122	115	...	...	...	...	1770	4	1300	18802	...	172	...	15	1929	188	650	...	58,043 70

(Pigou to Watsheeshoo).

...	...	...	...	...	...	815	2	...	2800	...	38	...	...	820	10	276	...	4,912 00
...	50	...	...	...	...	3250	...	...	700	...	40	10	...	3000	...	1000	30	17,939 00
...	...	...	...	...	...	2000	...	...	800	...	35	...	...	1500	...	700	50	11,186 00
...	...	...	...	...	...	2820	...	...	800	...	25	...	...	2100	...	800	...	15,175 00
3000	60	...	...	...	...	4000	...	...	1000	...	10	...	...	3500	...	1000	100	21,960 00
70900	...	...	...	...	...	5220	...	...	2000	...	10	...	...	4600	...	1200	75	41,587 50
...	...	...	...	...	...	1500	...	...	1500	...	...	...	...	1360	120	500	...	9,176 00
...	260	...	...	...	...	5000	...	...	3000	...	300	...	...	10000	2000	1200	...	33,770 00
...	...	...	...	...	...	...	...	...	3000	...	...	...	...	300	100	...	...	613 00
73900	370	...	...	...	...	24605	2	...	12600	...	438	30	...	27180	2230	6676	255	156,318 50

(Watsheeshoo to Coacoashoo).

...	...	...	...	...	2160	1750	...	...	200	...	...	...	...	1250	...	110	...	9,806 40
...	...	...	...	...	...	70	...	...	...	...	...	...	...	50	...	5	...	486 50
56700	130	...	...	...	1440	4300	...	...	1400	...	...	...	...	5200	790	245	...	35,419 60
...	...	...	...	...	30800	1350	...	2000	...	...	...	...	...	1750	230	200	...	12,242 50
56700	130	...	...	...	34400	7470	...	2000	1600	...	...	...	...	8250	1020	560	...	57,955 00

(Coacoashoo to Chicatica).

...	25	...	...	...	...	200	...	...	...	...	...	...	...	1150	350	100	...	2,124 00
...	...	...	...	...	...	2750	...	...	...	...	...	...	...	2150	50	750	...	14,486 50
...	21	...	...	...	...	1800	...	...	...	...	...	...	...	2000	175	450	...	10,048 25
128	...	...	...	...	...	2000	...	...	...	...	...	...	...	2000	80	500	...	11,418 00
396	...	...	...	...	...	750	...	...	...	...	...	...	...	3000	800	200	...	7,785 00
20	...	...	...	...	17280	250	...	...	...	...	...	...	...	600	130	75	...	4,245 20
...	...	...	...	...	...	60	...	...	...	...	...	...	...	40	...	10	...	397 00
254	...	...	...	...	...	200	...	...	...	...	...	...	...	150	...	50	...	2,178 00
...	844	...	...	...	17280	8010	...	...	...	...	...	...	...	11090	1585	2135	...	52,681 95

RETURN showing the Number and Value of Vessels, Boats and
County of
BONNE ESPÉRANCE SUBDIVISION

DISTRICTS.	FISHING VESSELS AND BOATS.						FISHING MATERIAL.						Salmon, salted, brls.		
	Vessels.				Boats.		Gill-Nets.		Trap-Nets.		Seines.				
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Fathoms.	Value.	Number.	Value.	Number.	Fathoms.		Value.	
<i>Saguenay County.</i>			\$			\$		\$		\$			\$		
Nabitiippi and Bull Cove					4	200	4	600	300		1	30	30		
Rocky Bay and Dog Islands and Old Fort					34	1600	54	2200	1100	14	2400	5	170	310	9
Bonne Espérance					60	3600	115	2600	1300	8	2400	8	680	1560	14
Pidgeon Island and Stick Point..	1	54	1000	8	12	1000	20	1000	500	4	1000	4	400	800	6
Salmon Bay					40	2000	80	1000	500	6	1000	6	600	1200	3
Little Fishery to Belles Amours.					18	1000	36	1000	500	5	1000	4	90	220	7
Bras d'Or and Long Point.....					30	1500	60	4000	2000	6	1200	4	200	400	2
Greenly Island and Blancs Sablons					45	2200	110	1200	500	2	640	7	640	1280	2
Totals.....	1	54	1000	8	243	13100	479	13600	6700	45	9640	39	2810	5800	43

ANTICOSTI

Fox Bay and Salmon Bay					23	920	22	800	400		1	200	75	
Mauzerolle to Macdonald's Cove..					18	720	36	1000	500		2	300	150	
English Bay					20	1000	38	750	370					
Strawberry Cove					22	440	33	500	250		1	150	70	
Shallop Creek and Goose Point...					15	175	20	100	100					
Cormorant Point and South Point					18	270	25	200	150					
Totals.....					116	3525	174	3350	1770		4	650	295	

TOTAL FOR THE COUNTY

<i>Subdivisions.</i>															
Godbout	3	60	900	8	270	5400	223	6500	6500	1	200	9	500	500	10
Moisie	4	114	2450	13	78	4390	151	8305	6800			12	562	860	
Mingan,	15	707	9100	77	485	19405	1173	4650	3500	7	2000	42	2011	2100	110
Natashquan	4	88	2000	22	79	3781	166	4250	1570			12	495	385	114
St. Augustin.....					199	7940	309	6500	4350	27	5300	17	1120	900	50
Bonne Espérance	1	54	1000	8	243	13100	479	13600	6700	45	9640	39	2810	5800	43
Anticosti					116	3525	174	3350	1770			4	650	295	
Totals	27	1023	15450	128	1470	57541	2675	47155	31190	80	17140	135	8148	10840	327

Fishing Material, &c., Province of Quebec—Continued.

Saguenay—Continued.

(Chicatica to Blancs Sablons).

KINDS OF FISH.														FISH PRODUCTS.				TOTAL VALUE.	
Salmon, fresh, in ice, lbs.	Herring, salted, brls.	Herring, fresh or frozen, lbs.	Herring, smoked, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Cod tongues and sounds,	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Clams, brls.	Squid, brls.	Coarse and mixed fish, brls.	Fish oils, galls.	Seal skins, No.	Fish used as bait, brls.	Fish used as manure, brls.		
.....	20	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	.....	.....	40	10	10	.....	\$ cts.
.....	100	.....	.....	.....	.....	1600	.....	.....	.....	.....	.....	.....	.....	1400	200	470	.....	223 50
.....	100	.....	.....	.....	.....	5800	.....	.....	.....	.....	.....	.....	.....	3060	20	1950	.....	9,309 00
.....	20	.....	.....	.....	.....	1500	.....	.....	.....	.....	.....	.....	.....	1090	30	370	.....	30,948 00
.....	60	.....	.....	.....	.....	4000	.....	.....	.....	.....	.....	.....	.....	3000	30	1500	.....	7,874 50
.....	100	.....	.....	.....	.....	800	.....	.....	.....	.....	.....	.....	.....	800	100	600	.....	21,625 50
.....	50	.....	.....	.....	.....	2500	.....	.....	.....	.....	.....	.....	.....	3000	400	600	.....	5,327 00
.....	450	.....	.....	.....	.....	4100	.....	.....	.....	.....	.....	.....	.....	4000	400	1020	.....	14,332 00
.....	.....	.....	.....	.....	.....	20320	.....	.....	.....	.....	.....	.....	.....	16390	1190	6520	.....	22,337 00
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	111,976 50

ISLAND.

.....	100	.....	.....	.....	29904	200	.....	.....	.....	.....	.....	.....	.....	500	130	100	50	6,074 06
.....	300	.....	.....	.....	.....	900	.....	.....	.....	.....	.....	.....	.....	700	.....	250	.....	6,055 00
.....	80	.....	.....	.....	.....	450	.....	.....	.....	.....	.....	.....	.....	300	.....	200	200	2,905 00
.....	100	.....	.....	.....	.....	575	.....	.....	.....	.....	.....	.....	.....	500	20	300	200	3,812 50
.....	.....	.....	.....	.....	28800	.....	.....	.....	.....	.....	.....	.....	.....	60	20	200	.....	4,381 00
.....	.....	.....	.....	.....	9600	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	150	.....	1,569 00
.....	580	.....	.....	.....	68304	2125	.....	.....	.....	.....	.....	.....	.....	2060	170	1200	450	24,796 56

OF SAGUENAY.

77624	897	28000	1500	1	2256	1849	8	2400	4890	4600	.....	20	35	4809	971	192	176	33,418 99
223122	115	.....	.....	.....	.....	1770	4	1300	18802	.....	172	15	15	1929	188	650	.....	58,043 70
73900	370	.....	.....	.....	.....	24605	2	.....	12600	.....	438	30	.....	27180	2230	6676	255	156,318 50
56700	130	.....	.....	.....	34400	7470	.....	2000	1600	.....	.....	.....	.....	8250	1020	560	.....	57,955 00
.....	844	.....	.....	.....	17280	8010	.....	.....	.....	.....	.....	.....	.....	11090	1585	2135	.....	52,681 95
.....	450	.....	.....	.....	.....	20320	.....	.....	.....	.....	.....	.....	.....	16390	1190	6520	.....	111,976 50
.....	580	.....	.....	.....	68304	2125	.....	.....	.....	.....	.....	.....	.....	2060	170	1200	450	24,796 56
431346	3386	28000	1500	1	122240	66149	14	5700	37892	4600	610	50	50	71708	7354	17933	881	495,191 20

RECAPITULATION.
Showing the Number and Value of Vessels, Boats and Fishing Material, &c., in the Gulf Division, for the Year 1896.
TOTAL FOR THE GULF DIVISION—PROVINCE OF QUEBEC.

Number.	DISTRICTS.						FISHING VESSELS AND BOATS.				FISHING MATERIAL.				KINDS OF FISH.				
	Vessels.				Boats.		Gill-Nets.		Trap-Nets.		Seines.		Salmon, salted, brls.	Salmon, fresh in ice, lbs.	Herring, salted, brls.	Herring, fresh or frozen, lbs.	Herring, smoked, lbs.		
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Value.	Number.	Value.	Number.	Fathoms.						Value.	
1	County of Bonaventure	13	577	19000	114	1360	22495	2384	121172	26769	90	5400	212	5393	3764	244375	5470	47300	1
2	do Gaspé	27	1023	15450	128	1470	57541	2675	47155	31190	80	17140	135	8148	10840	187996	23477	2380	2
3	do Saguenay	40	1600	34450	242	5910	171742	10847	277486	128355	175	24015	489	19867	21793	431346	3386	1500	3
	Grand totals															863717	32333	40000	51080

RECAPITULATION.

Showing the Number and Value of Vessels, Boats and Fishing Material, &c., in the Gulf Division. for the Year 1896.

TOTAL FOR THE GULF DIVISION—PROVINCE OF QUEBEC.

Number.	Districts.	KINDS OF FISH.															FISH PRODUCTS.				TOTAL VALUE.	Number.
		Mackerel, salted, brls.	Lobsters, preserved, in cans, lbs.	Lobsters, alive or fresh, tons.	Cod, dried, cwt.	Cod tongues and sounds, brls.	Haddock, cwt.	Trout, lbs.	Halibut, lbs.	Smelts, lbs.	Clams, brls.	Hels, brls.	Squid, brls.	Tom cod or frost fish, lbs.	Coarse and mixed fish, brls.	Fish oils, galls.	Seal skins, No.	Fish used as bait, brls.	Fish used as manure, brls.			
1	County of Bonaventure	16	130828	4	13871	22	124	3700	120200	288843	527	121	40	65200	45	8097	4686	26210	201,932	37		
2	do Gaspé	6818	905754	109397	109397	175	798	1600	120200	138202	300	196	2261	50	50	82850	4630	28433	2878	977,462	46	
3	do Saguenay	1	122240	14	66149	14	5700	5700	37892	4600	610	50	50	50	50	71708	7354	17933	881	495,191	20	
	Grand totals	6835	1158822	4	189417	211	922	11000	158092	431645	1437	317	2351	65200	95	162655	11984	51052	29969	1,674,586	03	

STATEMENT showing Yield and Value of the Fisheries of the Gulf Division, P.Q.,
for the Season of 1896.

Kinds of Fish, &c.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Salmon, salted	Brls. 349	16	00	5,584	00
do fresh, in ice	Lbs. 863,717		20	172,743	40
Herring, salted	Brls. 32,333	4	50	145,498	50
do fresh, in ice	Lbs. 40,000		0 01	400	00
do smoked	" 51,080		0 02	1,021	60
Mackerel, salted	Brls. 6,835	14	00	95,690	00
Lobsters, canned	Lbs. 1,158,822		0 14	162,235	00
do fresh	Tons. 4	75	00	300	00
Cod, salted	Cwt. 189,417	4	50	852,376	50
do tongues and sounds	Brls. 211	10	00	2,110	00
Haddock, salted	Cwt. 922	3	50	3,227	00
Trout	Lbs. 11,000		0 10	1,100	00
Halibut	" 158,092		0 10	15,809	20
Smelts	" 431,645		0 05	21,582	25
Clams	Brls. 1,437	5	00	7,185	00
Eels	" 317	10	00	3,170	00
Squid	" 2,351	4	00	9,404	00
Tommy cods	Lbs. 65,200		0 05	3,260	00
Coarse and mixed fish	Brls. 95	3	00	285	00
Fish oil	Galls. 162,655	0	40	65,062	00
Seal skins	Pieces. 11,984	1	25	14,980	00
Fish used for bait	Brls. 51,052		1 50	76,578	00
do as manure	" 29,969		0 50	14,984	50
Total				1,674,585	35
Total value in 1896				1,674,586	03
do 1895				1,518,829	43
Increase in 1896				155,756	60

STATEMENT showing Number of Men, with Quantity and Value of Material employed
in the **Gulf Division** Fisheries, Season of 1896.

Description.	Value.
	\$ cts.
40 vessels of 1,600 tons, manned by 242 men.....	34,450 00
5,910 boats, fished by 10,847 men.....	171,742 00
277,486 fathoms of gill-nets.....	128,355 00
175 cod trap and smelt-bag nets.....	24,015 00
489 seines of 19,867 fathoms.....	21,793 00
87 lobster canneries, employing 2,380 hands.....	39,705 00
94,551 lobster traps with trawl lines, buoys, &c.....	63,126 00
157 freezers and ice-houses.....	10,390 00
767 smoke and fishhouses.....	152,925 00
180 piers and wharfs (private).....	43,150 00
814 trawl-lines for cod.....	6,356 00
Total value.....	606,007.00

OF THE GULF DIVISION—*Continued.*

together with the Yield, Value and Kinds of Fish, &c., on the south shore of the to Point Lévis, during the year 1896.

KINDS OF FISH.												VALUE.		Number.
Shad, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Pickarel, lbs.	Sturgeon, lbs.	Eels, lbs.	Sardines, brls.	Catfish, lbs.	Mixed and coarse fish, lbs.	Halibut, lbs.	\$	cts.	
.....	217	6000	.....	.....	.....	.....	.....	.....	4800	4000	400	1,272	50	1
.....	854	20600	.....	700	.....	.....	.....	.....	3100	6000	500	5,512	00	2
.....	145	3000	.....	.....	.....	.....	.....	.....	.....	.....	.....	852	50	3
.....	900	23000	.....	100	.....	.....	.....	40	1500	6000	1150	4,845	00	4
.....	164	11600	.....	10000	.....	.....	600	120	.....	.....	.....	4,845	00	4
.....	380	1200	.....	200	.....	.....	.....	.....	150	.....	500	1,807	00	6
.....	1530	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,807	00	6
.....	1000	.....	.....	.....	.....	.....	.....	10	.....	.....	.....	6,885	00	7
.....	2400	.....	.....	.....	.....	.....	.....	20	.....	.....	.....	4,690	00	8
.....	2925	.....	.....	.....	.....	.....	.....	10	.....	.....	.....	11,070	00	9
.....	3000	960	.....	60000	.....	.....	.....	.....	.....	.....	.....	13,357	50	10
.....	8120	300	1584600	.....	.....	.....	8200	78	.....	3700	.....	10,575	00	11
.....	11500	244	66200	1000	.....	2120	1950	.....	.....	.....	.....	35,502	20	12
.....	300	420	.....	.....	.....	6950	5760	*677	.....	16000	.....	3,970	00	13
.....	10230	300	.....	.....	.....	210	1700	1170	.....	72000	.....	*9,776	10	14
.....	4500	2	.....	.....	.....	1250	5770	400	.....	3600	.....	6,366	30	15
.....	500	200	.....	.....	.....	2000	111820	29	.....	8200	.....	2,043	70	16
.....	500	12	.....	.....	.....	3750	26290	.....	.....	3600	.....	1,888	90	18
.....	.....	.....	.....	.....	.....	.....	21150	.....	.....	16000	.....	1,429	00	19
.....	.....	.....	.....	.....	.....	.....	19050	.....	.....	14000	.....	1,283	00	20
.....	.....	.....	.....	.....	.....	.....	16250	.....	.....	10000	.....	1,075	00	21
.....	.....	.....	.....	.....	.....	.....	31360	.....	.....	2800	.....	1,909	60	22
.....	.....	200	.....	.....	.....	450	8100	.....	.....	3000	.....	554	50	23
.....	2000	.....	3050	.....	1500	2300	10490	.....	.....	50000	.....	1,738	40	24
.....	5890	.....	6050	.....	450	2645	56400	.....	.....	2400	.....	4,440	15	25
.....	3700	.....	6200	.....	950	7200	35000	.....	.....	3600	.....	3,381	50	26
.....	7200	.....	2380	.....	555	3033	45200	.....	.....	3000	.....	3,603	80	27
.....	18470	.....	2300	.....	830	2365	24000	.....	.....	2000	.....	2,991	95	28
.....	13500	.....	2310	.....	825	900	30200	.....	.....	4000	.....	3,023	05	29
.....	.....	.....	.....	10000	.....	.....	.....	.....	.....	.....	.....	1,000	00	30
89410	12953	1716200	22490	82000	5110	35173	459290	2554	9550	233900	2550	.....	.....	.....
5365	58288	34324	1799	8200	256	1759	27557	7662	191	2339	255	159,829	85	.....

* No. 14. Including 99,200 boxes of sardines preserved in oil, \$4,960.

† In No. 5 including 8,000 lbs. Tom cods valued at \$400.

‡ No 17. Including 63 belugas (white whales), \$1,512.

RETURN of the Number of Fishermen, Value of Vessels, Boats, and Nets as well
from Quebec to Bersimis, in the Province

Number.	DISTRICTS.	BOATS.			FISHING MATERIAL.				
		Number.	Value.	Men.	Gill-Nets.			Brush or Eel-Weirs.	
					Number.	Fathoms.	Value.	Number.	Value.
	<i>Island of Orleans.</i>		\$				\$		\$
1	St. Laurent			14				14	3300
2	St. Jean			17				17	2330
3	St. François			27				27	2375
4	Ste. Famille			15				15	1800
5	St. Pierre			9				9	1500
6	Ste. Pétronille			1				1	200
	<i>North Coast.</i>								
7	Ange Gardien et Château Richer			10				10	950
8	Ste. Anne de Beaupré			5				5	250
9	St. Joachim			23				23	2200
10	Charlevoix County			125	4	380	90	120	960
	<i>Saguenay Division.</i>								
11	St. Firmin	4	245	5				4	80
12	Tadoussac	6	225	8	3	430	260	1	25
13	Bergeronnes	3	60	3	3	350	230		
14	Bon Désir	2	20	2	1	50	30		
15	Escoumains	8	120	8	5	480	280	3	75
16	Sault au Mouton	4	80	4				6	150
17	Mille Vaches	4	80	4	1	80	48	4	100
18	Portneuf	4	80	4	3	300	180	5	125
19	Sault au Cochon	1	20	1	1	100	60		
20	Islets Jérémie	3	60	3	4	300	150	2	50
21	Bersimis	2	40	2	1	80	48	1	30
22	Inland Waters								
23	Lake St. John District			125				1	30
	Totals	41	1030	415	26	2550	1376	267	16500
	Values	\$							

*Estimated. No. 23, include 90,000 lbs Ouananiche and 10,000 lbs. pike.

as the Quantity and Kinds of Fish, &c., in the North Shore of the St. Lawrence, of Quebec, during the Year 1896.

KINDS OF FISH.												VALUE.		Number.	
Salmon, lbs.	Shad, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickarel, lbs.	Sturgeon, lbs.	Eels, lbs.	Sardines, brls.	Mixed and coarse fish, lbs.	Belugas, No.	\$	cts.	
232	9450			2140		4285	2640		29200				3,097	10	1
416	5100			5920		11840	3760		32200				4,166	80	2
16	250			1000		2000	1200	200	22900		600		1,748	20	3
				3320		6640	3420	2600	14200		4800		2,130	60	4
				2885		5775	2520		16400				1,918	30	5
				480		960	360		2000				272	40	6
				1032		2085	1260	1800	9700		1400		1,040	06	7
				480		960	360		1800				260	40	8
									32570				1,954	20	9
1540			8000		48000				18770	165	8000	9	7,185	20	10
6500		10	1000		5000					5	60000	75	4,280	00	11
41480			2000		3000						40000	50	10,236	00	12
20680					1000								4,236	00	13
2500		8											536	00	14
15900		40	1000		2000					15	100000	25	5,225	00	15
2000		50	3000		1000					8	80000		1,609	00	16
9500		45	3000		5000					20	100000		3,722	50	17
11460		30	2000		4000					15	40000		3,312	00	18
6900					500					10			1,460	00	19
14900			500		1000					5	20000		3,305	00	20
300		10	1000		2000					5	40000		740	00	21
12000					25000								4,900	00	22
				17030	13000		41000				60000		*5,310	00	23
146324	14800	193	21500	34257	110500	34545	56520	4600	179740	248	554800	159			
29265	888	868	430	2741	11050	3455	2826	230	10784	744	5548	3816	78,544	76	

of Men, together with the Yield, Value and Kinds of Fish, &c., within the District Province of Quebec, during the Year 1896.

KINDS OF FISH.												VALUE.		Number.
Shad, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickarel, lbs.	Pike, lbs.	Maskinongé, lbs.	Sturgeon, lbs.	Eels, lbs.	Perch, lbs.	Catfish, lbs.	Mixed and Ccarse fish, lbs.	\$	cts.	
....	3200	60000	8000	31325	31875	2800	509	1000	2500	2000	48000	11,389	00	1
.....	6500	35400	21000	23500	2000	.....	.....	2500	39000	.....	23000	8,795	00	2
.....	6300	.....	.....	19760	.....	.....	.....	.....	.....	.....	76600	3,024	00	3
.....	.....	.....	3480	4660	7400	.....	1100	46050	9930	.....	96330	5,934	90	4
1000	.....	.....	500	700	1200	.....	2000	500	600	400	10000	571	00	5
.....	.....	.....	7100	14550	18200	11140	6100	16050	19100	16850	6150	5,235	90	6
3000	1000	.....	5000	7900	7000	3200	8680	48650	47400	5600	158000	9,730	80	7
1400	.....	100	2500	8000	2900	800	1000	16740	.....	.....	36800	2,687	40	8
.....	800	.....	2780	11375	10810	5900	4065	20480	400	.....	154750	6,329	35	9
27800	4230	.....	1640	2075	2210	920	5800	19500	6260	6380	.....	4,240	45	10
5400	1800	1300	300	2500	3400	200	4000	.....	.....	.....	5000	†2,569	00	11
.....	40350	50000	.....	5500	7500	1100	16000	15000	21000	.....	125000	13,934	00	12
6350	.....	45000	4170	6200	7050	1200	1000	56200	6150	.....	35200	10,269	60	13
.....	.....	.....	3000	10000	13500	5000	9500	2500	.....	.....	40000	3,235	00	14
.....	.....	.....	2900	3950	1950	2700	2850	1400	1450	.....	11650	1,220	50	15
1000	1500	900	800	6500	13500	1500	18200	1250	2050	28000	12000	3,452	50	16
.....	.....	.....	7100	38220	29200	12130	16050	10700	750	14950	61540	7,824	10	17
.....	10500	98100	14650	10600	.....	.....	.....	.....	.....	.....	.....	12,352	00	18
45950	76180	290800	84920	207315	159695	48590	96845	258520	156590	74180	900020	.....	.....	.....
2757	6094	29080	6794	10365	7985	2915	5811	15511	4698	1484	18000	112,794	50	.....

†NOTE.—In No. 11 add 2,600 bushels of Tom-cods, valued at \$1,300.

RECAPITULATION

Of the Yield and Value of the Inland Fisheries of the Province of Quebec
(exclusive of the Gulf Division) for 1896.

Kinds of Fish.	Price.	Quantity.	Value.
	\$ cts.		\$ cts.
Salmon..... Lbs.	0 20	171,139	34,227 80
Shad..... "	0 06	150,160	9,009 60
Herring, salted..... Brls.	4 50	13,146	59,157 00
do fresh..... Lbs.	0 02	1,737,700	34,754 00
Whitefish..... "	0 08	132,927	10,634 16
Trout..... "	0 10	483,300	48,330 00
Pickarel..... "	0 05	268,945	13,447 25
Sturgeon..... "	0 06	136,618	7,799 35
Bass..... "	0 08	119,465	10,248 10
Maskinongé..... "	0 06	48,590	2,915 40
Pike..... "	0 05	169,695	8,484 75
Eels..... "	0 06	897,550	53,853 00
Sardines..... Brls.	3 00	2,802	8,406 00
do preserved in oil..... Boxes.	0 05	99,200	4,960 00
Perch..... Lbs.	0 03	156,590	4,697 70
Catfish..... "	0 02	83,730	1,674 60
Halibut..... "	0 10	2,550	255 00
Ouananiche..... "	0 06	90,000	5,400 00
Tom cod..... Bushels	0 50	2,600	1,700 00
do..... Lbs.		8,000	
Belugas..... No.		222	5,328 00
Mixed and coarse fish..... Lbs.	0 02	1,688,720	25,887 40
Total for 1896.....			351,169 11
do 1895.....			349,091 10
Increase.....			2,078 01

RECAPITULATION

Of the Yield and Value of Fisheries in the whole Province of Quebec, for 1896.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Salmon, pickled.....	Brls. 349	16	00	5,584	00
do fresh, in ice.....	Lbs. 1,034,856	0	20	206,971	20
Herring, salted.....	Brls. 45,479	4	50	204,655	50
do fresh.....	Lbs. 1,777,700			35,154	00
do smoked.....	" 51,080	0	02	1,021	00
Mackerel, salted.....	Brls. 6,835	14	00	95,690	00
Lobsters, canned.....	Lbs. 1,158,822	0	14	162,235	00
do fresh.....	Tons. 4	75	00	300	00
Cod, dried.....	Cwt. 189,417	4	50	852,376	50
do tongues and sounds.....	Brls. 211	10	00	2,110	00
Haddock.....	Cwt. 922	3	50	3,227	00
Halibut.....	Lbs. 160,642	0	10	16,064	20
Trout.....	" 494,300	0	10	49,430	00
Smelts.....	" 431,645	0	05	21,582	25
Eels, salted.....	Brls. 317	10	00	3,170	00
do.....	Lbs. 897,550	0	06	53,853	00
Shad.....	" 150,160	0	06	9,009	60
Sturgeon.....	" 136,618	0	06	7,799	35
Sardines.....	Brls. 2,802	3	00	8,406	00
do preserved in oil.....	Boxes. 99,200	0	05	4,960	00
Whitefish.....	Lbs. 132,927	0	08	10,634	16
Maskinongé.....	" 48,590	0	06	2,915	40
Bass.....	" 119,465	0	08	10,248	10
Pickrel.....	" 268,945	0	05	13,447	25
Pike.....	" 169,695	0	05	8,484	75
Ouananiche.....	" 90,000	0	06	5,400	00
Perch.....	" 156,590	0	03	4,697	70
Squid.....	Brls. 2,351	4	00	9,404	00
Catfish.....	Lbs. 83,730	0	02	1,674	60
Clams.....	Brls. 1,437	5	00	7,185	00
Tom cod or frost fish.....				4,960	00
Coarse and mixed fish.....	Lbs. 1,707,720			26,172	40
Seal skins.....	No. 11,984	1	25	14,980	00
Belugas, white whales.....	" 222			5,328	00
Fish oils.....	Galls. 162,655	0	40	65,062	00
Fish as bait.....	Brls. 51,052	1	50	76,578	00
Fish as manure.....	" 29,969	0	50	14,984	50
Total for 1896.....				2,025,754	46
do 1895.....				1,867,920	53
Increase.....				157,833	93

STATEMENT

OF the Number and Value of Fishing Boats, Nets and other Fishing Material used in the Inland Waters of **Quebec** (exclusive of the Gulf Division), for 1896.

Articles.	Total.
	\$ cts.
1,051 fishing boats (2,326 men).....	14,657 00
683 gill-nets (16,483 fathoms).....	6,509 00
225 seines (6,705 fathoms).....	4,343 00
314 hoop-nets (verveux).....	7,679 00
759 brush and eel weirs.....	70,542 00
Total.....	103,730 00

RECAPITULATION

OF all Fishing Gear employed in the whole Province of Quebec in 1896.

Articles.	Value.	Total.
	\$ cts.	\$ cts.
40 vessels, 1,600 tons (242 men).....	34,450 00	
6,961 boats (13,173 men).....	186,399 00	
293,969 fathoms of gill-nets.....	134,864 00	
714 seines (26,572 fathoms).....	26,136 00	
175 cod traps, and smelt nets.....	24,015 00	
314 hoop-nets.....	7,679 00	
759 brush and eel weirs.....	70,542 00	484,085 00
87 lobster canneries (2,380 hands).....	39,705 00	
94,551 do traps, lines, &c.....	63,126 00	102,831 00
157 freezers and ice-houses.....	10,390 00	
767 smoke-houses and fish-houses.....	152,925 00	
180 piers and wharfs.....	43,150 00	
814 trawl lines for cod.....	6,356 00	212,821 00
Total.....		799,737 00

APPENDIX No. 7.

ONTARIO.

SYNOPSIS OF FISHERY OVERSEERS' REPORTS IN THE PROVINCE OF ONTARIO, FOR THE YEAR 1896.

LAKE OF THE WOODS DIVISION.

Overseer M. Kyle, recently appointed in charge of this division, states that the fisheries were prosecuted with even more activity than usual, there being fifty pound-nets more than in 1895, and although fish were not as plentiful the total result is in excess of the preceding year. The exceptionally high water had a tendency to cause the fish to migrate from their usual feeding grounds to others, which under ordinary conditions would not have been available. The quantity of caviare prepared and shipped to New York thence to Europe, was somewhat less than last year. About 75 per cent of the whole catch of fish, consisting chiefly of sturgeon, whitefish and pickerel, valued at \$143,000, is exported to United States markets and the balance shipped to Eastern Canada. Some cases of illegal fishing were attended to, and resulted in the confiscation of twenty-one gill-nets and 4,500 lbs. of fish. This happened in Lakes Manitou and Sandy. Mr. Kyle recently examined the only fish-way in his district, that of the Keewatin Power Co., on the Winnipeg River, and found it in good order.

LAKE SUPERIOR.

Overseer D. F. Macdonell, who has charge of the upper part of Lake Superior returns about the same quantity of fish as last year, chiefly whitefish and salmon trout, valued at over \$100,000.

Overseer T. H. Elliott reports an increased catch of fish in the lower part of Lake Superior, which he ascribes to a more vigorous prosecution of the fishing industry. One firm alone admitted having handled 400,000 lbs. of fish more than last year. With few exceptions the close seasons were well observed. One party who was caught fishing during the month of November, was fined and had his nets confiscated. This part of the lake also yielded over \$100,000 worth of fish mostly salmon-trout and whitefish, making an aggregate value of over \$200,000, about the same as last year.

LAKE HURON.

North Channel of Lake Huron, including Manitoulin Island.

Mr. Elliott, who has also charge of this division, reports a shortage in the catch of fish especially in the vicinity of Killarney where fishermen did not even make wages. Excepting some two hundred barrels of fish, the whole catch is shipped fresh to United States markets. Seining, trap-netting and the small mesh in pound-nets are the chief abuses complained of. Seining was illegally carried on especially in the vicinity of Killarney. Some of these poachers boast that they can seine or use nets even when a cruiser is within ten miles. The numerous islands and deep bays of that coast afford them safe hiding places. The mesh of pound-nets should not be less than four inches in extension and that of gill-nets five inches. This measure,

if adopted, might prove detrimental to the fishermen for three or four years, but in the end it would turn out to their advantage. All licensed boats, tugs and gear should be numbered according to licenses. This would greatly facilitate the labour of fishery officers in detecting illegalities. There are no fish-ways here at present, but three or four could be advantageously placed in this district. The total value of fisheries of this part of Lake Huron is reckoned at \$247,730, being a surplus of \$43,000 over the previous one.

GEORGIAN BAY.

Overseer F. J. Smith reports a decline in the fisheries of that part of Georgian Bay owing to a smaller number of boats engaged in this industry. The large yield of pickerel is attributed to hook fishing through the ice. Owing to the demand for these fish, this new industry was pushed with great vigour during the winter months. With few exceptions the close seasons were well adhered to. Illegal seining and netting were still carried on but not to such an extent as last year. Only four prosecutions for illegalities took place during the season. The total yield of this division is made up at \$82,700, a shortage of \$17,500, as compared with the previous one.

Overseer J. Donaldson states that the fish run during May, June and July was much better than last year. Nearly one million pounds of salmon-trout alone were shipped to Buffalo and Detroit from this division as well as 90 per cent of the whole catch. A large quantity of immature fish passed through Collingwood this summer which must have been caught in small meshed nets outside of this division. The close seasons for fish were fairly observed. The whole catch is estimated at \$126,000, being an increase of about 50 per cent over the previous yield.

Overseer R. Edmonstone states that whitefish are decreasing on the south shore of the bay, salmon-trout show an increased yield, but were late in coming on the shoals. Fishermen are complaining of the loose crushed bark stripped off the logs while being towed across to the United States. This nuisance not only damages their nets, but injures the fishing grounds.

Mr. Edmonstone assisted Captain Pearson of the "Dolphin" to seize twenty-two gill-nets in his and the neighbouring district. The total catch is valued at \$25,000.

Overseer Isaac Lennox ascribes the increase in the catch of trout in his district to a larger number of licensees fishing for them. There is a considerable falling off in pickerel. The Buffalo Fish Company alone handled over two million pounds of fish, shipping more than half to Buffalo. He also complains that many immature whitefish and trout were shipped through Wiarton and he advocates a regulation making it an offence to capture any of either kind of less than 2½ lbs. in weight. He helped Captain Pearson to seize and destroy some trap-nets and trout-nets, the latter being set within the Cape Croker Indians limits contrary to licenses. The yield of this division is valued at \$40,000.

The total value of the fisheries of Georgian Bay from French River to Cabot's Head is computed at \$273,900, about the same as last year.

LAKE HURON CONTINUED.

(From Cape Hurd to Point Edward.)

Overseer Charles Briggs reports a decrease in nearly every kind of fish except whitefish which shows a considerable improvement. The number of fishing boats was less than last year, and several fishermen are now only using small fishing rigs who used to fish more extensively. About 70 per cent of the whole catch, valued

at \$70,000, is exported and the balance used in the vicinity. Complaints are heard that bark stripped from logs and ground by friction while being towed across the lake is often washed ashore, injuring both nets and fish. Wherever this bark is found dead fish are to be seen. The close seasons were well observed. This officer has several parties at different points to watch and to keep him posted of any illegalities they might discover. During the month of November he is constantly on the move himself up and down his division. Some illegal fishing was carried on by parties coming from other districts to fish for herring in the fall in his division where shelter is of easy access, and several confiscations were the result. Saw-mills are visited whenever an opportunity offers, and the law seems well respected in that way.

Overseer Hugh McFayden states that fishing on the Saugeen River was the poorest for years. The dry weather kept so long that the water became very low and the speckled trout, (the only kind of fish caught here) sought refuge under logs and stones from the numerous anglers camping on the river banks. He estimates the quantity of that game little fish at 15,000 lbs.

Overseer H. W. Ball states that the falling off in the fisheries of this division is partly ascribed to scarcity of fish, but chiefly because tugs from Goderich were not allowed to fish south of said port as usual. Neither illegal fishing nor contravention of the sawdust regulations came to his notice. Mr. Ball is of opinion that confining the limits of tugs or boats to a specified area is unfair, and he recommends that they be allowed to roam anywhere from their port, provided they could lift their nets and return the same day. He urges the adoption of a close season for herring, and recommends that all fall fishing should cease on 31st of October. The privilege of taking herring during the close season for trout and whitefish give poachers a favourable opportunity to evade the law. Herring, which twenty-five years ago filled Lake Huron is now getting scarce. The decline of herring also means the falling off of trout, as the former affords food for the latter. This officer recommends the prohibition of fall fishing, for a few years at least, as well as the adoption of a larger mesh. Eighty-seven per cent of the whole catch valued at \$43,000, is exported and the balance used for home consumption.

Overseer H. B. Quarry reports the fishing operations of his district as satisfactory. Had the weather been more favourable, the aggregate yield would have exceeded that of 1885. The improvement noticed in salmon-trout is attributed to the supply of fry from the hatcheries. Good catches of herring were affected. Only two fines were imposed for illegal fishing in this division. Mr. Quarry states that the pound-nets of his division are very much exposed to the heavy gales prevailing on that part of the coast, which not only damage but often destroy them. For the above reason, fishermen would like to see the fee on pound-net licenses reduced. About one-third of the whole catch of fish valued at \$14,700 is used in Canada, the remainder is exported to the United States.

Overseer J. C. Pollock states that he has difficulty in obtaining reliable data of the yield of fish in his division. He believes the catch, such as given, greatly underestimated. Several pound-net fishermen who had rented their gear on shares were greatly disappointed when the owner took them away early in July to the Michigan side, where he expected better returns. This induce them to secure twine and prepare nets of their own for next season and thus become independent of foreign capital. The total yield of this district is valued at \$28,800, and that of that part of Lake Huron, south of Cape Hurd at \$158,600, while the total value of the whole lake including the north Channel and Georgian Bay is reckoned at \$680,276, hardly \$18,000 less than last year.

LAKE ST. CLAIR DIVISION.

Overseer Joseph Boismier remarks that whitefish were more plentiful than last year, both in Lake St. Clair and Detroit River, excepting from Fighting Island to Lake St. Clair, where none were caught. Pickerel also show a fair increase, due to the open season. Large quantities of sturgeon were also captured, but they were mostly of small size. Numerous set lines were used to capture sturgeon, some even without licenses. Bass and maskinonge both show serious signs of diminution.

Overseer C. W. Raymond says that excepting sturgeon, which the Indians say were scarce, the fisheries of Mitchell's Bay gave an average yield, even better than in 1895. The anglers, however, claim that bass is decreasing and they blame the use of seines, which injures the spawn. He issued 78 angling permits to foreigners. This officer favours the use of hoop-nets to capture coarse fish which are so destructive to the finer grades of fish, especially young bass. As Mitchell's Bay is a fine natural spawning ground he would recommend the prohibition of the seine entirely therein.

Thames River.

Overseer Peter McCann states that rod fishing in the Thames River was good. At first, large quantities of coarse fish were caught in the spring, then bass fishing was continued till the end of the season. He says that carp have been caught at different places in the river, and judging from their size and number, they will soon prove an unwelcome visitor to our waters. The thirteen fish-ways of this division were kept in good repairs and are pronounced by all parties to be an entire success. Several complaints of illegalities, upon investigation, proved comparatively trifling.

The total value of the Thames River fisheries is computed at \$10,750, and that of the whole Lake St. Clair including Detroit River at \$42,000.

LAKE ERIE DIVISION.

Overseer J. E. Quick remarks that he has especially watched the black bass in the Pelee Island during its spawning season and come to the conclusion that it spawns from the 15th of May to the 10th July. He found none ready to spawn before the 15th May, and of three opened on the 10th July, two had not yet spawned. He has no complaints against any fishermen of his division. The yield is valued at \$8,000.

Overseer J. K. Laird returns a decreased catch of fish chiefly herring 2,400,000 lbs., pickerel 130,000 lbs., and pike 115,000 lbs. It was about 1st June before all pound-nets were fishing and the heavy gales on the 5th November put a stop to any further attempts of exposing nets. Fishermen complain of being compelled to observe the close season for pickerel while the citizens on the other side of the border fish for them at all times. The whole yield is valued at \$90,000, a shortage of over 25 per cent as compared with the previous catch.

Overseer Wm. Freeland states the falling off in the catch is ascribed to the fact that few fishermen began operations until after the expiration of the pickerel close season (15th May). Fishing remained light until the latter part of October. Here also the storm of the 5th November practically closed the season's fishing. He reports the drowning of two fishermen at Port Bruce. The close season was fairly well observed by our fishermen. The staple fish of this division are herring, 700,000 lbs., and pickerel, 418,000 lbs. The total yield is valued at about \$50,000.

Overseer D. Sharp returns an average catch of fish in his division, although he remarks that pound-net fishing was not a success. Fish were late coming on the shores, and the mighty gales of October destroyed the nets to such an extent, that

it ended the fall fishing. The gill-net fishermen, who went out 80 or 90 feet deep, met with good success, catching mostly blue-black pickerel. Mr. Sharp recommends that a clause, compelling the pound-net fishermen to return to the water alive all immature fish found in their pounds, be inserted in their licenses. The total yield of fish in this division is valued at \$35,300.

Overseer W. F. Croome states that the catch of fish in Grand River was about the same as last year and is all used for local consumption. The mill owners are careful not to pollute the streams with saw-dust and debris, although a few manufactures allow colouring matter to escape, but not in sufficient quantity to injure fish life. However, he is of opinion that the sewage of Brantford should not be permitted to flow into the Grand River. There may be no immediate danger, but with the extension of the system it might, in the near future, seriously affect fish life. This sewage should at least go through filtering beds before escaping into the water. The eleven fish-ways in this division have all been inspected and found in good state of repair. The close seasons were fairly well observed and any infractions that came under his notice were thoroughly investigated. Several parties were fined through the energy of the local Fish and Game Club which rendered valuable services in enforcing the fishing regulations. Mr. Croome suggests the advisability of shortening the close season and of allowing no fishing whatever during said time on all inland streams.

The total catch of fish from the whole of Lake Erie is valued at \$241,200, a deficit of 20 per cent as compared with last year.

LAKE ONTARIO.

Overseer F. Kerr whose district includes the east end of Lake Erie and the west end of Lake Ontario linked by the famous Niagara River, reports that the condition of the fishermen of his division is most favourable, the increase of salmon-trout and whitefish gives hope to those who follow that branch of the industry. Larger quantities of the blue-back herring were caught, but prices ruled lower than last year, thus placing fish within the reach of all classes. These herrings were so plentiful that fishermen could not handle them properly and were compelled to curtail their nets to limit the quantity to the demand. These fish are all smoked and thus more easily disposed of on the markets. They were abundant at every fishing station along Lake Ontario except at Niagara where the falling off could not be accounted for. The run of immature herring at Queenston was immense and no doubt the fishing-traps there slaughtered a great many. So much so, that he recommends the abandonment of this mode of fishing, which he considers very detrimental to the species. On the Lake Erie portion of his district, herring fishing was poor, although a few good individual hauls were made; this was neither continuous nor general. Herring seem to remain more on the United States shore last season. Cisco-herring have almost disappeared and are no more expected by fishermen who now consider them as a thing of the past. Whitefish and salmon-trout were caught in large quantities, especially at Grimsby and Winona. The fact that immense quantities of young whitefish are caught in herring gill-nets proves that they are abundant and that if the supply of the young fish was not disturbed they would shortly become as numerous as formerly. Certain regulations should be enacted to give them due protection. Sturgeon fishing either at Fort Erie or at Niagara was inferior to that of 1895. These large fish are mostly caught now with baited hooks on set lines. They were noticed at nearly every fishing stations on Lake Ontario, and a few were captured even as far down as Burlington Beach, where they had not been observed for years. Sturgeon are becoming more and more valuable as a table fish and are as much sought after as any other kind. Perch, pike and other coarse fish appeared to be as plentiful as ever. Perch should be protected during its spawning season as it is fast becoming a valuable edible fish. Mr. Kerr spent a good deal of time watching the United States poachers on the Niagara River, three men were arrested and fined and a boat and seine seized at Navy Island; at Queens-

ton three parties were fined for fishing without permits and their boat confiscated. At Fort Erie three men were arrested and fined for catching bait illegally, their boats being also seized. Besides these a few illegal nets were taken in Burlington Bay and their owners fined. Only 26 angling permits were issued to foreign tourists. With the assistance of the Fish and Game Protector of New York State, he broke up several poaching parties, and between them they have succeeded in checking seining altogether in this international stream. He recommends the refusal of the privilege to the machine traps usually set at Queenston, as they are injurious to herring.

Oveeseer Wm. Sargent notices a considerable improvement in the yield of herring. Some very large captures were made during November and December, and had prices remained as good as in 1895, the yield would have been still larger. Angling for bass was satisfactory and some fine specimens were caught. A few illegal nets were seized and destroyed in Twelve and Sixteen Mile Creeks, and although he could not discover the owners, he found no other since. There are no fish-ways in this district and they are not needed.

Overseer James Stanley reports a surplus in the yield of trout and whitefish, but herring almost a failure, which fact he cannot account for. The gill-net fishermen claim the seine destroys or injures the feeding grounds of the fish. This officer must share in their belief as he recommends the prohibition of the seine in Lake Ontario. Fishing for coarse fish in Presqu'île Bay was not as successful as former years.

Overseer J. Redmond is pleased to report the increase of the finer grades of fish around Prince Edward County. Whitefish and trout are certainly becoming more plentiful, and the old fishermen have not given up hopes of seeing the good old time of large catches of fish return. They are of opinion that to the distribution of fry from our hatcheries is due the improvement noticed. The close season have been well observed. Three hoop-nets and several gill nets were seized during the summer for illegalities. The total yield of this division is valued at about \$20,000.

Overseer W. P. Clarke returns a small surplus in the whole yield of fish of Bay of Quinté. The quantity of whitefish taken was not quite so large as last year, as no seining was allowed, otherwise it would have been much larger. He states that to the planting of fry in the Bay is attributed the increase in the supply of fish. About the three fourths of the catch is shipped to the United States and the remainder used at home. He has little trouble with the licensed fishermen, but sometimes poachers are met running to the spawning grounds, but he could not convict any. The mill-owners also comply faithfully with the regulations, respecting saw-dust. He recommends that all licensed implement should be so marked either by numbers or otherwise to enable the officer to detect unlicensed gear. Customs officers should be instructed to give foreign anglers and tourists the proper directions and save our officers considerable unnecessary trouble. The total yield of this district is valued at \$16,800.

Overseer James McGlynn reports the fishing operations around Wolfe Island about the same as in the previous season. Coarse fish were plentiful in the spring but scarce in the fall. The low water in this district somewhat affected the fisheries. Whitefish were as abundant as usual but scarcely any salmon-trout were to be seen; the high wind and low water caused them to seek deep water. Bass seemed plentiful in the beginning of the season, but anglers became so numerous that they thinned them out pretty well before the Autumn. Ninety per cent of these sportsmen bring their own food and leave no money in Canada.

Overseer E. H. Sills reports a slight increase over last year's catch ascribed to a more vigorous prosecution of the industry. Low wages and low prices for agricultural products have caused many farmers to add fishing to increase their revenue. He has no abuses to complain of. The various close seasons were well observed. There are no fishways in this district.

FRONTENAC, LEEDS AND LANARK.

Overseer John Purdy for the Kingston district returns a fair catch consisting chiefly of pike and catfish, but makes no remarks.

Overseer Geo. Lake states that less fish were taken in his division than last year owing to a smaller number of persons seeking them. The close seasons were generally well observed. One party was however convicted of illegal fishing and duly fined. The mill-owners have also complied with the regulations. The only fish-way in this division is kept in good working order. Another fish-ladder should be placed at the foot of Bob's Lake. This officer would favour the granting of a few hoop-nets in some of those lakes to capture as many coarse fish as possible, which are now detrimental to the propagation of the finer grades frequenting those waters.

Overseer H. R. Purcell says that the fish are only caught for domestic use in his division. Anglers report fair bass fishing. Several complaints of illegalities, upon investigation, proved groundless.

Overseer R. A. Gilbert also reports hook and line fishing as fairly successful. No netting of any kind is permitted in this division. The close seasons and saw-dust regulations were fairly respected. A great number of tourists visit those lakes every summer.

Overseer Robt. Poole thinks that the season's fishing operations compare favourably with previous ones. The increase in the capture of sturgeon is due to the greater number of set-lines being permitted in that vicinity. Bass and pike are caught by summer visitors during July and August. The sturgeon is shipped to New York. All unlicensed gear found in use was confiscated by this officer. He favours the issue of hoop-nets to reduce the supply of coarse fish as bull-heads, catfish, eels, etc., and thereby improving the condition of the game fish.

Overseer J. G. Wallace states that he heard no complaints from anglers of the scarcity of any kinds of fish, and he believes the catch to be quite up to the average. Several small nets were confiscated during the summer, but he thinks they were fished mostly for domestic use by the settlers.

PARRY SOUND AND MUSKOKA.

Overseer G. R. Steele visited as much as possible the different lakes and streams of his division as well as the principal fishing resorts. He is of opinion that the close seasons and other fishery laws were generally complied with and observed. Settlers complain of being refused the privilege of fishing for herring with small nets for their own use. As these fish, which are plentiful in most of those waters, cannot be captured otherwise than with nets, Mr. Steele would favour the use of small nets for that purpose. In visiting saw-mills, he noticed that certain owners while not exactly throwing the saw-dust in the streams deposited it so near the edge of water that some of it would be washed in by the freshets. Consequently all parties were notified to desist from a practice which might be conducive to evil results.

Overseer E. Forsyth states that fish are still plentiful and there has been a slight increase in the quantity of fish taken during the past season, ascribed to the fact that people now generally resort more to fish for food than formerly. He complains of no abuses in his district and no penalties were imposed. He recommends a change in the close season for salmon-trout to begin about the 15th October, as by the first November they have partly spawned in that locality.

PETERBOROUGH DIVISION.

Overseer G. W. Fitzgerald reports that although fishing was better in some localities than others, it was generally more satisfactory than in 1895. Eight different prosecutions for illegalities resulted in as many convictions. There is no more trouble from mill owners respecting the rubbish of their mills. He reports that the different guardians under his charge performed their duties to his satisfaction.

Overseer D. Breeze states that this has been one of the best fishing seasons ever known on the Otonabee River and district. The quantity of maskinongé and bass taken was enormous. This he attributes to the better observance of fishery regulations, especially the saw-dust Act. The mill-owners now endeavour to keep the debris from the streams. The residents on the river banks are now commencing to render assistance in the protection of fish, and finding out that it is in their interest to do so.

He seized three nets and imposed a couple of fines. One party who resisted was fined twenty dollars and costs. This officer's canoe was purposely damaged with spears. Mr. Breeze thinks that the close season for maskinongé should be identical in Otonabee River to that of Rice Lake. If a party be found with maskinongé in his boat, he undoubtedly would claim to have caught it in the lake. There are several dams and more being built in this division which should be provided with fish-passes. The Otonabee between Peterborough and Lakefield with its gravel bottom would be a capital spawning ground for bass.

There is one class of poacher which he finds almost impossible to properly watch and that is the frog catcher. He is out in the creeks and marshes almost every night from May till fall sometimes with a jack-light and then again with a reflector, and it is said, that when no one is near he will not scruple to kill maskinongé and hide them on shore until he can ship them to the United States with his frogs.

SIMCOE DISTRICT.

Overseer Wm. McDermot is pleased to state that the fishery laws have been more strictly observed this season than ever before since he was an officer. The fact that he has not a single conviction to report speaks well for the better observance of the different regulations. The visit of the Dominion Police a couple of years ago had a salutary effect and he would like to receive another such visit from them. The mill-owners evince a commendable spirit in observing the laws respecting saw-dust and fish-ways and they now have a complete chain of fish-passes on the Nottawasaga and Boyne Rivers and their tributaries. All kinds of fish seem as plentiful as ever. This is specially noticed in the increase of speckled trout in small streams, and that of perch and catfish in the Hoiland River.

LAKE SCUGOG DIVISION.

Overseer A. Bradshaw reports a large catch of maskinongé and bass, (nearly 200,000 lbs.), which he considers less than that of 1895. The low water prevailing during the summer months, prevented trolling over the weedy beds. The law was fairly well observed, the only two violators who came before him were duly fined and reported to the department at the time. A good fish-way is urgently required at Lindsay's dam as the old one is useless. The figures and other information given by him are gathered from fishermen, dealers, farmers residing on water fronts as well as based upon his own personal observation.

WELLINGTON COUNTY AND VICINITY.

Overseer D. Coleman has charge of parts of Rivers Credit and Nottawasaga and their tributaries. The former crosses the Township of Caledon and the latter the Township of Mono. The country through which these streams flow is mostly cleared

up, with the exception of the lands in the immediate vicinity of the banks which are often steep and otherwise unfit for cultivation. The beds of the streams are mostly gravelly, their banks skirted with bushes, and logs or fallen trees strewn here and there, all affording excellent cover and protection to brook or speckled trout which are the principal species of these waters. Until quite recently no attention was ever paid to trout protection. They were fished for at all times of the year with every device that the ingenuity of the fisherman could suggest. Sections of the streams once noted resorts for this game fish would soon become depleted. It is not many years ago that parties were known to visit these beautiful natural spawning grounds and capture trout by the pailful during their spawning time. However a better state of affairs is now appearing; fishing out of season is stopped, illegal appliances are strictly prohibited, and altogether such protection is given to trout that a marked increase is noticeable which he estimates at fifty per cent. A remarkable interest is now taken in the propagation and protection of speckled trout throughout this district. Two private hatcheries have been established and are doing a lucrative business, and often the ponds and sections of streams are preserved and protected by the owners of such establishments, thus adding protection to the fish. He reports against giving permits to capture trout out of season for stocking purposes as immense numbers of young trout are thus transplanted to private ponds. He would like to see the close season begin on the 1st instead of the 15th September.

ARIO.

of Men employed, &c., with the Kinds and Quantities of Fish in the Province of the Year 1896.

KINDS OF FISH.													VALUE.		Number.
Herring, fresh, lbs.	Whitefish, brls.	Whitefish, lbs.	Trout, lbs.	Trout, brls.	Pickarel, lbs.	Pike, lbs.	Maskinongé, lbs.	Sturgeon, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Caviare, lbs.	Bladders, lbs.	\$	cts.	
.....	.....	552860	75490	.....	372215	66180	1390	849480	29280	84580	53020	1050	143,110	35	1
.....	.....	26000	18000	.....	14500	7000	.....	.....	.....	.....	.....	.....	4,885	00	2
11000	150	220000	235000	315	4700	.....	.....	22000	.....	.....	.....	.....	47,635	00	3
2500	25	42000	30000	110	2400	.....	.....	1200	.....	.....	.....	.....	7,977	00	4
2530	95	87500	93000	160	4700	.....	.....	3970	.....	.....	.....	.....	19,399	10	5
.....	11	9000	11200	20	.....	.....	.....	.....	.....	.....	.....	.....	2,150	00	6
.....	6	27000	51000	800	.....	.....	.....	2000	.....	.....	.....	.....	15,440	00	7
.....	.....	13700	11500	33	2300	.....	.....	2700	.....	.....	.....	.....	2,903	00	8
.....	.....	.....	117800	151	.....	.....	.....	.....	.....	.....	.....	.....	13,290	00	9
.....	.....	10000	111600	60	.....	.....	.....	.....	.....	.....	.....	.....	12,560	00	10
.....	.....	5500	88000	26	.....	.....	.....	.....	.....	.....	.....	.....	9,500	00	11
.....	.....	9000	20000	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,720	00	12
.....	.....	28000	21400	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,380	00	13
.....	.....	10700	14500	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,306	00	14
.....	.....	66900	43900	.....	.....	.....	.....	400	.....	.....	.....	.....	9,766	00	15
.....	.....	19300	30000	18	.....	.....	.....	.....	.....	.....	.....	.....	4,724	00	16
.....	.....	39000	24200	.....	2100	.....	.....	4600	.....	.....	.....	.....	5,921	00	17
.....	.....	99400	201500	150	.....	.....	.....	.....	.....	.....	.....	.....	29,602	00	18
.....	.....	15600	18700	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,118	00	19
.....	.....	17900	17600	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,192	00	20
.....	.....	8000	10000	2	500	.....	.....	.....	.....	2000	.....	.....	1,725	00	21
.....	.....	10000	8000	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,600	00	22
16030	287	764500	1176900	1850	31200	7000	.....	36870	.....	2000	.....	.....	.....	.....	.....
481	2870	61160	117690	18500	1560	280	.....	2212	.....	40	.....	.....	204,793	10	.....

RETURN of the Number and Value of Tugs and Boats, &c., and the Quantity

Number.	DISTRICTS.	FISHING					
		Tugs or Vessels.			Boats.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.
				\$			\$
	LAKE HURON DIVISION.						
	<i>North Channel, Manitoulin Island and vicinity.</i>						
1	Duck Islands.....	1	15	2000	6	6	1200
2	Green Island.....					5	1000
3	Burnt Island.....	2	22	5000	12	1	150
4	Misery Bay.....					1	100
5	Providence Bay.....					9	500
6	Michael's Bay.....					9	500
7	South Bay Mouth.....	1	15	2000	6	10	1500
8	Killarney.....					32	2300
9	Round Island.....					13	650
10	Wickwimikong.....					17	1000
11	Fitzwilliam Island.....					2	300
12	Squaw and Lonely Islands.....	3	117	13000	20	24	4030
13	Beavertown.....					2	200
14	Pointe aux Grondines.....					2	100
15	Black Point.....					2	200
16	Bad and French Rivers.....					5	500
17	Bustard Islands.....	2	19	4000	9	16	3000
	Totals.....	9	188	26000	53	156	17230
	Values.....						

and Value of Fish, &c., in the Province of Ontario—Continued.

MATERIAL.				KINDS OF FISH.									
Gill-Nets.		Pound Nets.		Herring, lbs.	Whitefish, lbs.	Trout, lbs.	Pickarel, lbs.	Pike, lbs.	Sturgeon, lbs.	Mixed and coarse fish, lbs.	VALUE.		Number.
Fathoms.	Value.	Number.	Value.								\$	cts.	
	¢		¢										
25000	4000	9	2000	12800	55200	155730					20,373	00	1
15000	1000			20000	6500	87000					9,820	00	2
12000	1640	5	2000	50000	4000	240000	500		2300		25,983	00	3
		2	350	200	1200	8850			250		1,002	00	4
9000	500					3200					3,200	00	5
9000	500					3200					3,200	00	6
25000	3500			14700	9000	217270			500		22,918	00	7
99000	6000				227000	127000	11000	4500	1000	1250	31,675	00	8
15000	2000				56530	15236	2200				6,156	00	9
20000	1500				40000	30000	40	50	1000		6,264	00	10
4000	500				8000	12000					1,840	00	11
81900	20020				252000	343450	400				54,525	00	12
3000	200			4600	5300	960	1000	1870	1330	1600	894	60	13
2000	200				2000	2000			2000		480	00	14
2000	200				6000	12000	6000	500	1000	2000	2,100	00	15
6500	550			12500	4700	6000	6000		1000	2000	1,751	00	16
60000	3000			46000	246000	235000	185000	8000	23000	2000	55,550	00	17
388400	45310	16	4350	160800	923430	1556496	212140	14920	33380	8850	.....	
				4824	73874	155650	10607	597	2003	177	247,731 60		

and Value of Fish, &c., Province of Ontario, 1896—*Continued.*

KINDS OF FISH.												VALUE.	Number.
Whitefish, brls.	Whitefish, lbs.	Trout, lbs.	Trout, brls.	Herring, salted, brls.	Herring, fresh, lbs.	Bass, lbs.	Pickarel, lbs.	Pike, lbs.	Sturgeon, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.		
												\$ cts.	
...	60000	90000	...	...	...	...	7000	...	...	...	...	14,150 00	1
...	50000	120000	...	...	...	500	10000	4000	3000	...	...	16,870 00	2
20	30000	20000	20	25	...	...	25000	2000	...	...	...	6,242 50	3
...	40000	27000	30	100	...	...	...	...	...	...	...	6,650 00	4
50	35050	38000	95	910	...	...	52000	2000	...	8000	...	14,939 00	5
...	60000	10000	...	50	...	...	120000	16000	10000	40000	10000	14,265 00	6
20	10500	15000	10	70	...	...	101600	20700	300	22000	14300	9,607 00	7
...	234350	991630	...	35	77800	700	60800	3860	41600	...	1200	126,158 90	8
...	2000	117800	...	...	...	...	...	...	...	...	...	11,940 00	9
...	2500	125900	...	...	8700	...	...	...	...	...	1000	13,071 00	10
10	30350	365670	20	65	7000	...	1000	...	2000	...	...	39,967 50	11
100	554750	1921000	175	1255	93500	1200	377400	48560	56900	70000	26500	...	...
1000	44380	192100	1750	5648	2805	72	18870	1942	3414	1400	530	273,910 90	...

Return of the Number of Tugs, Vessels and Boats, and the Quantity and Value of Fish, &c., Province of Ontario, 1896—Continued.

LAKE HURON (Proper)—Continued.

DISTRICTS.		FISHING MATERIAL.										OTHER FIXTURES USED IN FISHING.					
		Tugs or Vessels.		Boats.		Gill-Nets.		Seines.		Pound-Nets.		Hoop-Nets.		Freezers and Icehouses.		Piers and Wharfs.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Fathoms.	Value.	Number.	Value.	Fathoms.	Value.	Number.	Value.	Number.	Value.
1 Cape Hurd to Southampton		5	85	15500	33	37	3500	87	113000	15150	13	1300	865			2	500
2 Sauguen							Angling and trolling.										
3 Port Elgin to Kincardine		1	20	1500	5	3	450	7	18000	2400							
4 Port Albert to Goderich		3	85	8500	18	9	900	21	48000	8500						4	700
5 Goderich to Blue Point		1	25	2000	6	17	1145	36	18100	1360						4	500
6 Blue Point to Point Edward						25	1215	25			2	105	105			6	600
Totals		10	215	27500	62	91	7210	176	197100	27410	15	1405	970		700	2	500
Totals for Georgian Bay		19	452	66700	113	185	18505	412	620650	85920					27800	18	4400
do North Channel		9	188	26000	53	156	17230	312	388400	45310					5700	11	7900
Grand Totals for whole Lake Huron.		38	855	120200	228	432	42945	900	1206150	158640	15	1405	970		34200	31	12800
<i>Lake St. Clair Division.</i>																	
1 River St. Clair						14	430	11	3000	100							
2 Lake St. Clair, including Mitchell's Bay		1	3	150	4	31	1075	60								10	300
3 Thames River						20	200	150									
4 Detroit River		1	10	500	3	17	410	70									
Totals		2	13	650	7	82	2115	291	3000	100	74	5520	5120			10	300

* 8 Dip-nets, \$20.

Return of the Number of Tugs, Vessels and Boats, and the Quantity and Value of Fish, &c., Province of Ontario, 1896—Continued.
LAKE HURON (Proper)—Continued.

KINDS OF FISH.															
Number.	DISTRICTS.	VALUE.													
		Trout, brls.	Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickarel, lbs.	Pike, lbs.	Maskinongé, lbs.	Sturgeon, lbs.	Fels, lbs.	Perch, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.
Number.															\$
1	Cape Hurd to Southampton.....	250	2160	20000	130000	468200									70,040 00
2	Saugeen.....					13000									1,500 00
3	Port Elgin to Kincardine.....			12000	3500	60000	4000	2000	200			150	25000		15000
4	Port Albert to Goderich.....			25000	8500	288400	28000	6000	900			1250	75000		46000
5	Goderich to Blue Point.....			62050	19020	65475		46310	110			36900			8300
6	Blue Point to Point Edward.....		140	63380	7500	4600	30	340830				129210	50	730	20480
	Totals.....	250	2300	182430	168520	901675	32030	395440	1210			167360	400	101940	89780
	Totals for Georgian Bay.....	175	1255	93500	*534750	1921000	1200	377400	48560			56900		70000	26500
	do North Channel.....			160800	923430	1556496		212140	14920			33380			8850
	Grand Totals for Lake Huron.....	425	3555	436730	1646700	4379171	33230	984980	64690			257640	400	101940	125130
															680,276 10
Lake St. Clair Division.															
1	River St. Clair.....			13400	2350	4150	400	130750				38880		7240	16400
2	Lake St. Clair, including Mitchell's Bay.....			3500	7200		11805	54050	35400	2220		51200		83400	29600
3	Thames Bay.....						2450	138200	13800	700		1000			4500
4	Detroit River.....				44000		550	13870	3050			600			32128
	Totals.....			16900	53550	4150	15265	336870	52250	2920		91680		90640	398758
	Values..... \$			507	4284	415	916	16844	2090	175		5501		2719	7875
															42,007 76

NOTE.—In No. 8, add 100 brls. of salted whitefish.

RETURN of the Number and Value of Tugs and Boats, &c., and the Quantity

[illegible]

and Value of Fish, &c., in the Province of Ontario—*Continued.*

KINDS OF FISH.													
Herring, fresh, lbs.	Whitefish, lbs.	Bass, lbs.	Pickarel, lbs.	Pike, lbs.	Maskinongé, lbs.	Sturgeon, lbs.	Perch, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Caviare, lbs.	VALUE.		Number.
											\$	cts.	
115330	9170	6000	18720	.....	.....	24100	3480	7710	42550	.....	8,045	10	1
701200	30220	13600	60500	.....	.....	70200	155000	.....	520600	.....	46,568	60	2
2393400	23970	.....	130790	115100	.....	30200	59520	730	42790	.....	89,331	10	3
701130	42960	2040	418390	.....	.....	33070	47700	1900	32390	735	49,834	10	4
87150	11720	200	22125	40500	.....	9020	2480	420	850	1600	7,411	35	5
9700	.....	7800	39120	21170	700	.....	80820	1700	98840	.....	8,039	20	6
54810	.....	630	15900	1460	.....	.....	41490	1510	.....	.....	3,810	40	7
99210	2000	1300	137040	1200	300	14250	39730	.....	3640	2500	13,002	00	8
33926	5840	500	6110	3240	30	9070	1180	50	22600	250	3,059	48	9
30150	420	2640	13200	3000	500	.....	8520	.....	13000	.....	2,422	10	10
5000	.....	800	4000	.....	.....	.....	4000	.....	5000	.....	618	00	11
10000	.....	1000	6000	.....	.....	.....	8000	.....	5000	.....	1,000	00	12
30000	.....	3000	20000	.....	.....	8000	10000	.....	3000	.....	2,920	00	13
4000	.....	.....	50000	4000	.....	20000	12000	.....	10000	.....	4,540	00	14
.....	.....	4000	5000	.....	.....	.....	.....	.....	5000	.....	590	00	15
4275006	126300	43510	946895	189670	1530	217910	473920	14020	805260	5085	.....	.....	.....
128250	10104	2611	47345	7587	92	13075	14218	280	16105	1525	241,191	43	.....

RETURN of the Number and Value of Tugs and Boats, &c., and the Quantity

DISTRICTS.		FISHING MATERIAL.													
		Tugs or Vessels.				Boats.			Gill-Nets.		Seines.			Hoop-Nets.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.
<i>Lake Ontario, including Niagara River and other tributaries.</i>				\$			\$			\$			\$		\$
1	Queenstown.....					2	120	6							
2	Niagara.....					7	700	14	20000	5000					
3	Port Dalhousie.....	1	8	1800	3	5	500	10	20000	5000					
4	Beamsville.....					4	300	8	15000	3000					
5	Burlington Beach.....					15	1185	30	25000	5000					
6	Angling and trolling in above districts.....														
7	Counties of Halton and Peel.....					15	2300	43	49900	5000					
8	County of York.....					8	900	11	9000	1330					
9	County of Ontario.....					6	225	12	1850	225					
10	County of Northumberland and Durham.....					17	850	28	63000	1575				25	375
11	Rice Lake and Trent River.....					35	770	50	Angling and trolling.				25	625	
12	County of Prince Edward.....	3	175	9000	12	65	2200	200	19800	3500	3	150	150	41	820
13	Bay of Quinté.....					48	1310	78	15450	1375				86	2050
14	Off Lennox and Napanee River.....					50	900	87	12200	1155	1	100	80	59	920
15	Wolfe Island and vicinity.....					25	650	22	3900	600				23	360
Totals.....		4	183	10800	15	302	12910	599	255100	32760	4	250	230	259	5150
Values.....		\$													

In No. 1 add 3 trap-machines, \$1,000.

and Value of Fish, &c., in the Province of Ontario—Continued.

KINDS OF FISH.												VALUE.		Number.
Herring, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickarel, lbs.	Pike, lbs.	Maskinongé, lbs.	Sturgeon, lbs.	Eels, lbs.	Perch, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	\$	cts.	
5	8	0	1	1	4	6	6	6	20	2	4			
40000			3000	5000					4000		6000	1,870	00	1
36000	4000	6600		50000	5000		26000		10000		20000	7,020	00	2
175000	4000	10000	1000	5000	1000		1000		10000		10000	7,480	00	3
170000	3000	12000		12000			2000		15000		10000	7,910	00	4
300000	8000	15000	4000		6000		5000	5000	25000		10000	13,170	00	5
			24000	86200	60000				95000			11,000	00	6
525000	1200	2500	1200		1100			300	600	1200	50000	17,272	00	7
21550	9150	6200			600						8800	2,198	50	8
6200	1200	100			550				400		1700	360	00	9
4000	10500	4200	500		40000	100		2000	500		10000	3,351	00	10
		3500	127000	30000	35000	114500	1000	12100	10600		113600	21,116	00	11
30050	75000	75000	4500	4800	10000	2000	3000	5000	9000		185000	19,881	50	12
170950	10600		3200	16875	87860	1120		5535	35500	129800	113900	16,864	95	13
26600	31200	9700	1800	55600	82900		3600	17600	30000		369600	23,032	00	14
	12500			3000	82500		1000	5000	35500		55500	6,985	00	15
1505350	170350	144800	170200	268475	412510	117720	42600	52535	381100	131000	964100			
45161	13628	14480	10212	13424	16500	7063	2556	3152	11433	2620	19282	159,510	95	

* Partly Estimated.

RETURN of the Number and Value of Tugs and Boats, &c., and the Quantity

Number.		DISTRICTS.	FISHING MATERIAL.										
			Tugs or Vessels.				Boats.			Gill-Nets.		Hoop-Nets.	
			Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Number.	Value.
		<i>Frontenac, Leeds and Lanark Counties.</i>			£		£			£		£	
1	Frontenac County.					20	360	90	2070	400	37	690	
2	Howe Island					5	77	5	1700	* 75	4	85	
3	Fronting on Leeds County.....					105	3750	210			5	40	
4	Lakes in Leeds and Lanark.					13	260	23	40	10	33	630	
Totals						143	4447	328	3810	485	79	1445	
Values		£											
1	†St. Lawrence River (from Brockville to Lancaster).....												
2	†Prescott and Carleton Counties.....												
3	†Renfrew County.....												
4	†Lake Nipissing.....												
5	†Parry Sound and Muskoka.....												
6	†Peterborough, Otonabee and vicinity												
7	†Victoria County and vicinity, including Lake Scugog.....												
8	†Lakes Simcoe, Couchiching and vicinity, including Severn and Holland Rivers												
9	†Wellington County and vicinity.....												

† Angling and trolling. * With set-lines and trolls.

and Value of Fish, &c., in the Province of Ontario—Continued.

KINDS OF FISH.												VALUE.		Number.
Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickarel, lbs.	Pike, lbs.	Maskinongé, lbs.	Sturgeon, lbs.	Eels, lbs.	Perch, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	§	cts.	
8100	500	19900	4000	500	99900	.....	.....	30500	1300	112530	10700	10,867	60	1
.....	.....	.....	500	260	8400	.....	600	850	1600	.....	5470	623	40	2
3550	1500	3900	59500	1000	139400	5350	17000	35400	26500	23000	101000	15,936	00	3
.....	.....	.....	7400	1000	12000	.....	.....	2150	1100	33100	72300	3,860	50	4
11650	2000	23800	71400	2760	259700	5350	17600	68900	30500	168630	189470	.....	.....	.....
350	160	2380	4284	138	10388	321	1056	4134	915	3373	3789	31,287	50	.....
.....	.....	.....	1500	600	6000	250	11200	1200	500	.....	10500	1,344	00	1
.....	400	.....	18450	7700	13100	7350	1600	6900	9400	27250	49600	4,818	00	2
.....	.....	.....	1400	1700	4500	.....	2000	250	560	.....	5100	602	80	3
.....	.....	.....	.....	.....	9000	.....	.....	.....	.....	.....	4500	450	00	4
2500	3500	23350	20600	27700	12250	3850	.....	.....	3600	3200	27700	6,758	00	5
.....	4000	59500	265000	.....	.....	447000	.....	4600	2000	2000	93000	51,226	00	6
.....	.....	.....	120000	.....	.....	150000	.....	5000	.....	.....	130000	19,100	00	7
25000	31000	73000	42000	17500	4200	22000	2400	.....	16000	12000	48000	17,237	00	8
.....	.....	15500	1600	.....	.....	.....	.....	200	1000	1000	12600	1,960	00	9

RECAPITULATION of the Number of Tugs, Boats, &c., and the Quantity and Value of Fish, &c., and other fixtures employed, in the Province of Ontario, for the Year 1896.

Number.	DISTRICTS.										FISHING MATERIAL.						KINDS OF FISH.		
	Tugs or Vessels.			Boats.			Gill-Nets.		Seines.		Pound-Nets.		Hoop-Nets or Verveux.		Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, brls.		
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.					
1	11	714	17050	38	81	8760	151	24000	1620	...	...	127	30150	6	180	...	16930	287	1
2	11	484	29800	65	94	13825	188	181800	25975	...	...	56	10700	...	...	...	436730	100	3
3	38	855	120200	228	432	42945	900	1206150	158640	15	1405	970	52	10380	23	460	3555	...	4
4	1	13	650	7	82	2115	291	3000	100	74	5520	5120	4	525	10	300	16900	...	4
5	21	425	53400	80	236	19840	408	60250	8740	31	4150	2025	191	76050	...	...	4275006	...	5
6	4	183	10800	15	302	12910	599	255100	32760	4	250	230	3	1000	259	5150	1595350	...	6
7	...	...	...	...	143	4447	328	3810	485	...	...	...	...	...	79	1445	11650	...	7
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2500	...	12
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25000	...	15
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
	86	2674	231900	433	1370	104842	2865	1734110	228320	124	11325	3845	433	128805	377	7535	35355	6289166	387
	Totals.																		

* Angling and trolling.

RECAPITULATION of the Number of Tugs, Boats, &c., and the Quantity and Value of Fish, &c., and other fixtures employed, in the Province of Ontario, for the Year 1896—Continued.

DISTRICTS.		KINDS OF FISH.												VALUE.		Number.
Whitefish, lbs.	Trout, lbs.	Trout, brls.	Pickarel, lbs.	Pike, lbs.	Maskinonge, lbs.	Sturgeon, lbs.	Eels, lbs.	Bass, lbs.	Perch, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Caviare, lbs.	Bladders, lbs.	\$	cts.	
1 Lake of the Woods.....	552860	75490	.....	372215	66180	1390	840480	.....	.....	.....	20280	84580	53020	1050	143,111	15
2 Lake Superior.....	764500	1176900	1850	31200	7000	.....	36870	.....	.....	.....	.....	2000	.....	.....	204,793	10
3 Lake Huron, including Georgian Bay.....	1646700	4379171	425	984980	64690	.....	257640	400	33230	101940	70000	125130	.....	.....	680,276	10
4 Lake St. Clair.....	53550	4150	.....	336870	52250	2920	91680	.....	15265	90640	34100	393758	.....	.....	42,007	76
5 Lake Erie.....	126300	.....	.....	946895	189670	1530	217910	.....	43510	473920	14020	805260	5085	.....	241,191	43
6 Lake Ontario.....	170350	144800	.....	268475	412510	117720	42600	52535	170200	381100	131000	964100	.....	.....	159,510	95
7 Frontenac, Leeds and Lanark.....	2000	23800	.....	2760	259700	5350	17600	68900	71400	30500	168630	189470	.....	.....	31,287	50
8 St. Lawrence River, Brockville to Lancaster.....	.....	.....	.....	600	6000	250	11200	1200	1500	500	.....	10500	.....	.....	1,344	00
9 Prescott and Carleton Counties.....	400	.....	.....	7700	13100	7350	1600	6900	18450	9400	27250	49600	.....	.....	4,818	00
10 Renfrew County.....	.....	.....	.....	1700	9000	.....	2000	250	1400	560	.....	5100	.....	.....	602	80
11 Lake Nipissing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4500	.....	.....	450	00
12 Parry Sound and Muskoka.....	3500	23850	.....	27700	12250	3850	.....	20000	3600	3200	.....	27700	.....	.....	6,758	00
13 Peterborough, Otonabee and vicinity.....	4000	59500	.....	.....	447000	.....	.....	4600	265000	2000	2000	93000	.....	.....	51,226	00
14 Victoria County and vicinity, including Lake Simcoe.....	.....	.....	.....	.....	150000	.....	.....	5000	120000	.....	.....	130000	.....	.....	19,100	00
15 Lake Simcoe, Couchiching and vicinity, including Severn and Holland Rivers.....	31000	73000	.....	17500	4200	22000	2400	.....	42000	16000	12000	48000	.....	.....	17,237	00
16 Wellington County and vicinity.....	.....	15500	.....	.....	.....	.....	.....	200	1600	1000	1000	12600	.....	.....	1,960	00
Totals.....	3355160	5975661	2275	2998595	1101050	759360	1530980	139985	804155	1111160	492489	2945298	58105	1050	1,605,673	79

RECAPITULATION

Of the Yield and Value of the Fisheries of the Province of Ontario, for the Year 1896.

Kinds of Fish.	Quantity.	Price.	Value.
		\$ cts.	\$ cts.
Whitefish.....	Brls. 387	10 00	3,870 00
do.....	Lbs. 3,355,160	0 08	268,412 80
Trout.....	" 5,975,661	0 10	597,566 10
do.....	Brls. 2,275	10 00	22,750 00
Herring.....	" 3,555	4 50	15,997 50
do fresh.....	Lbs. 6,289,166	0 03	188,674 98
Eels.....	" 139,985	0 06	8,399 10
Sturgeon.....	" 1,530,980	0 06	91,858 80
do caviare.....	" 58,105	0 30	17,431 50
do bladders.....	" 1,050	0 80	840 00
Catfish.....	" 492,489	0 02	9,849 60
Maskinongé.....	" 759,360	0 06	45,561 60
Bass.....	" 804,155	0 06	48,249 30
Pickarel.....	" 2,998,595	0 05	149,929 75
Pike.....	" 1,101,050	0 04	44,042 00
Coarse fish.....	" 2,945,298	0 02	58,905 96
Perch.....	" 1,111,160	0 03	33,334 80
Total for 1896.....			1,605,673 79
do 1895.....			1,584,473 70
Increase.....			21,200 09

STATEMENT

Showing the Number and Value of Fishing Tugs, Boats, Nets and other Fishing Material, used in Ontario, in 1896.

Articles.	Value.
	\$
86 fishing tugs or vessels (2,674 tonnage, 433 men).....	231,900
1,370 do boats (2,865 men).....	104,842
1,734,110 fathoms of gill-nets.....	228,320
124 seines; 11,325 fathoms.....	8,345
433 pound-nets.....	128,805
377 hoop-nets.....	7,535
night-lines.....	1,530
	711,277
230 freezers and ice-houses.....	96,030
92 fishing piers and wharves.....	31,225
Total value of material.....	838,532

APPENDIX No. 8.

MANITOBA.

REPORT ON THE FISHERIES OF MANITOBA, FOR THE YEAR 1896, BY INSPECTOR R. L. TUPPER.

SELKIRK, 1st January, 1897.

Hon. L. H. DAVIES,
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit to you my annual report for the year 1896, regarding the fisheries of the Province of Manitoba.

I am glad to be able to state that although the season has been more than ordinarily stormy, no wreck of any of the steamers, tugs or sailing boats engaged in the fisheries has occurred and no loss of life has taken place. Only ten commercial licenses were issued. The four fishing companies taking out licenses for 10,000 fathoms each; five owners of sail-boats for 1,400 each, and one small tug for 1,000 fathoms.

Commercial fishing commenced between the 1st and 5th of June, all the fishermen working from the harbours of Selkirk and Pony Islands, off the mouth of the Saskatchewan in the north end of the lake. Nets were set most of the time about midway, between Selkirk Island and the outlet of the lake, the entrance to the Nelson River. About the full complement of nets were used by each company as allowed. Nets in every case were strictly taken up Saturday and not reset until the following Monday. Fishing was very poor during the month of June owing to constant calm weather when the fish swim above the nets. The fishing improved in July when breezy weather caused a change, some of the hauls then were enormous, one firm lifting with less than 9,000 fathoms, 30,000 whitefish. As these fish average $3\frac{1}{2}$ lbs., the immense quantity of 105,000 lbs. was taken in one haul. The latter part of July the weather came stormy and continued more or less so during August, and an unusual loss occurred through inability to lift the nets regularly. A very large business had been done shipping fish fresh to the eastern markets, and it looked as if the complement of fish to fill the freezers to hold for sale during the winter and lenten season trade would not be had. The department was asked to extend the commercial fishing for this year until the 5th of October, the commencement of the domestic fishing close season. This was done, and on the 2nd and 3rd of September fishermen moved south to Reindeer and Swampy (or Berens) Islands, the weather continued stormy and was very cold. The companies could only use the tugs and fished during September with an average of 4,500 fathoms only. Owing to the large shipments of fresh fish made weekly during the summer, as I have already reported to you when operations ceased and the companies started for Selkirk to lay up their boats for the winter, they had about six hundred thousand pounds less fish in the freezers than they had at the same time in 1895, yet more fish were taken and marketed than during any year since 1893.

This year there have been added to the vessels engaged in the fisheries, one cold storage and passenger steamer costing \$20,500, one fishing tug costing \$5,100, and one cold storage and passenger steamer enlarged 40 feet at a cost of \$8,000, also an ammonia freezer at a cost of about \$30,000.

The experience gained in 1893 (I was only appointed inspector late in that year) was that despite the cutting down of the number of fathoms of nets allowed each company from 20,000 fathoms to 10,000 fathoms, which at first was thought a grievance—they had overstocked their market—and consequently, the fish were to a very great extent sold at a loss. The catch that year was 3,873,281 lbs. The companies in 1894 agreed to restrict the catch in order not to flood the market and they quit fishing early on obtaining 2,370,053 lbs. I had earnestly advocated shipping fresh fish in summer as had been proven possible by shipment of fresh fish I made to Commander Wakeham from the north end of Lake Winnipeg to Chicago, to the World's Fair. So in 1895 two companies commenced fishing in that manner and the catch was raised that year (1895) to 2,659,609, the extra 259,556 lbs. representing the shipments made of fresh fish. The same amount going into cold storage as the previous year. This year all the companies have gone into the shipment of fresh fish with satisfactory results. The returns are quick. Interest on outlay, insurance and storage is avoided. And if in the fluctuations of the market the price is not suitable for shipment when a shipment arrives from the lake it can be placed in the freezers and held. It is a curious fact that our market for whitefish is almost entirely in the cities situated between Montreal and Chicago, of which the great whitefish lake, Erie, is the centre, and where our fish come in competition with the fish of Lakes Huron, Michigan, Erie, and out on their own ground. I cannot understand why our market has not been sought south and south-west of us in the Prairie country where our distance of haul would be less and where whitefish are not caught. Such markets as St. Paul, Minneapolis, Sioux City, Omaha, Kansas City, and dozens of other large intervening towns should furnish us with a profitable market for all the fish we have to spare.

Our output of fish would increase largely, I am convinced, had we a market for them. As it is, full as many are caught as can profitably be sold at present, and had it not been for the summer shipments of fresh fish, which left so much less than usual in the freezers serious losses would have occurred this season. Naturally as settlement about the lakes increases more fishing is done. And now the railway is in reach of the fish of Winnipegosis—will most probably be at the lake early next year, a large increase in the output of whitefish, pickerel and pike will come from there. It will add no less than 2,011 square miles in that lake alone of available water which is known to be full of fish and where practically no fishing has hitherto been done.

In the northern part of Lake Winnipeg, where not one settler lives to disturb the waters and where the one or two small bands of Indians catch but a few fish near their homes for their own use, the commercial fishermen do not fish one-tenth of the waters or anything like it. The total number of fathoms of nets licensed is 47,600 and the season commences about June 5 and ends the 1st of September, take off 20 days lost lifting nets Saturdays and putting down Mondays and the fishing is two months ten days, the other nine months twenty days of the year, there is absolutely no fishing, and no market for more than now caught.

The number of square miles in the north end of the lake is 6,000 fully. The part north of Manitoba boundary in Keewatin being alone 4,588 square miles. Compare this with the time fishing and number of fathoms of net in Georgian Bay.

Georgian Bay, fathoms of gill-net licensed, 581,250. Time engaged fishing about five months.

Northern Lake Winnipeg, fathoms of gill-net licensed, 47,600. Time engaged fishing, two months, ten days.

In the 1894 report, Capt. Dunn reports poaching having been extensively carried on in Georgian Bay. Here there was absolutely none, so there must have been many more nets in Georgian Bay than the above shows. With all these nets the catch of whitefish and trout combined was but 2,955,600 lbs. in 1894.

This season's catch of whitefish alone in the north part of Lake Winnipeg set apart for commercial fishing was 3,270,320 lbs.

It must be remembered the season must always be short in northern Lake Winnipeg, it being in the same latitude as the Labrador coast, over 200 miles

north of the most northern point of Newfoundland. The ice never going out before the 1st of June and the harbours are frozen up in October as a rule,

The closing of the mouths of rivers for fishing, especially in the north end of the lake, at the little Saskatchewan where the whitefish resort in such numbers to spawn has proved a most wise measure. A great outcry was made at the time against the order and at the same time reducing the number of yards of net allowed each company from 20,000 fathoms to 10,000 fathoms—the following results (and it is only by results that the value of regulations can be proven—not by guessing) show:—

1892—Commercial fishing—Unrestricted fishing, mouth of Little Saskatchewan and other rivers, and Sundays up to the 5th of October:—

Number of fathoms of net.....	51,000
Pound nets.....	2
Catch.....	3,058,798 lbs.

1896—Commercial fishing—No fishing within five miles of the mouth of rivers. No fishing Sunday. Companies restricted to 10,000 fathoms each. No pound nets:—

Numbers of fathoms of nets.....	41,600
Catch.....	3,270,320 lbs.

or 212,522 lbs. more than in 1892! Can there be a better proof of the wisdom of the department, not only for the preservation of the fisheries, but for the immediate benefit of the fishermen themselves.

"An ounce of prevention is worth a pound of cure," and the results here are so plain that he who runs may read. I am convinced more fishing might safely be allowed in the north end of the lake, but certainly would not advise its extension until a market could be found for more than what is taken now. It is not now a question of the quantity to be safely taken without depletion, it is a question of only *catching what can profitably be marketed*.

STURGEON.

A little more attention was paid to fishing for sturgeon this year, with the result of a larger catch for market. The lack of ice-houses or freezers near the fishing grounds for these fish has kept operations back as the fish seemed to have spawned out before the fishing commenced. There were only 7 kegs of caviare made from the entire catch. While the flesh of our sturgeon is held to be the finest taken anywhere, the caviare contains too much fatty matter, even if it could be taken just before the spawning commences. I am compelled to believe there are not so many of these fish in Lake Winnipeg as have been supposed, strange to say that they inhabit only one side of the lake (the east side), and are never found on the west shore with one exception. At Fisher river the Indians caught some ascending the river to spawn this past spring, the first ever seen here by them. There are none of these fish in Lakes Manitoba or Winnipegosis, though there is nothing to prevent their going up the Little Saskatchewan River. On the great Saskatchewan River, however, there are in Cedar, Cross, Moose, Indian Pear, Pine Island and other lakes and all the streams, immense quantities of sturgeon, as also in the two Playgreen lakes and all the lakes down the Nelson River to salt water.

I have been told that in tide water at the mouth of the Nelson and as far up as they can go there are very large sturgeon often weighing 400 lbs. each. Sturgeon fishing for commercial purposes with gill-nets may safely be allowed as well as in the other lakes mentioned as they are now going to waste.

DOMESTIC FISHING.

Domestic fishing has been carried on to a greater extent than formerly and the year has been fairly successful. Lake Winnipeg is two feet higher than it has been the past few years, and I attribute in a great measure the increased catch to this.

Owing to higher water the fish have been nearer shore, and as the fishing is in small boats and canoes, which could not go out far to set, they have been able to reach more fish than in the last few years.

L. Schannus, fishery officer at Fort Alexander, says: "A decrease in the catch of whitefish is observed by the Indians and others, the former enjoying the privilege of fishing during close season for their own use. I note a number of small fish were caught this fall, and no doubt they were from the Selkirk hatchery. Local fishermen are not pleased to see the hatchery closed because they had great expectations of this part of the lake being stocked with whitefish."

Pickerel were caught in great quantities through the ice and also in the fall. The increase has to be ascribed to a more vigorous prosecution of the industry. Sturgeon fishing has been carried on at two different points in this district (Broken-head to Dog Head, east side) and was quite a success.

The close season was strictly observed; no illegal fishing came to my knowledge, as all willingly took license and used the regulation mesh. At Robinson's Mill, at Bad Throat, which was burned last summer, and the water having risen considerably some sawdust found its way into the lake—but prompt measures were taken to stop it. The fish industry is progressing in this district, with the exception of whitefish, and it is the unanimous desire of all the resident fishermen that the hatchery will be in operation next season.

1896.	Pounds.
Whitefish caught.....	47,500
Pickerel do	235,700
Pike do	63,100
Sturgeon do	110,500
Perch do	6,500
Tulibee do	59,300
Catfish do	30,000
Mixed and coarse, caught.....	2,244,200
<hr/>	
Value.....	\$19,934 00
Fathoms of net.....	30,300

It will be noticed this overseer and others note a decrease in this district. The cause is found in comparing the overseer's returns with the return for the previous year.

1895.	
Whitefish.....	51,050 lbs.
Fathoms of net.....	48,750

It will be seen that according to the overseer there were 18,450 fewer fathoms of net used in 1896 than in 1895. Yet the number of whitefish caught was only 3,550 lbs. less. I think this is proof that the fish were even more plentiful had they been fished for. Last season, however, pickerel were in great demand, and they were more sought for as is shown by comparing the two years again in the same district.

Catch of pickerel, 1895.....	197,010 lbs.
“ 1896.....	235,700 “
Increase.....	38,690 “
Sturgeon also were sought for to the neglect of whitefish.	
Result, 1895.....	75,800 lbs.
“ 1896.....	110,500 “
Increase.....	34,700 “
<hr/>	
Total value of all fish, 1895	\$ 18,441 80
“ “ 1896.....	19,934 00

Increase value of fish in this district (*see* Recapitulation), 1896, \$1,442.20, with 18,450 fathoms less net.

Robert Henderson, a very intelligent Indian living at Fort Alexander, writes as follows:—

"I have lived here fifteen years, the last ten years I lived by fishing. I caught more whitefish this year than before. I commenced fishing for pickerel in November near Catfish Creek, $1\frac{1}{2}$ mile out in the bay. I fished the same ground for pickerel year after year and never caught more than seven or eight stray whitefish on the pickerel ground in a season before this season. This year I caught about 100 small whitefish from $1\frac{1}{2}$ to 2 lbs. weight, all young fish and I think the same age. I am sure these fish are from the Selkirk Hatchery, if they are not I do not see where they came from.

I also received the following from the west shore of the lake from the Icelandic settlement:—

"HNAUSSA P.O., Oct. 8, 1896.

"We beg to state that last year we got some small whitefish about $1\frac{1}{2}$ lb., and this year we have got a good many whitefish about 2 lbs. These we judge are three years old and have never been seen here before. There can be no doubt they are from the Selkirk Hatchery. None of them were seen here three years ago.

"(Sgd) "STEPHEN SIGURDSSON,
"SIGURDUR SIGUREBJORNSSON,
"ISLEIFUR HELGASON,
"SIGURDUR G. NOEDAL, P.M."

WEST SHORE OF LAKE WINNIPEG—WILLOW POINT TO DOGHEAD.

The overseer for this district has been under suspension, consequently I have no report from him for 1896.

LAKE WINNIPEG—NORTH OF DOGHEAD, EAST AND WEST SIDE.

Wm. McEwan, overseer for this district says: "The laws here are well observed. The fish are more numerous than they have been for a number of years and I attribute this to the fact of the lake freezing up smooth this year. Consequently the fishermen can fish where they could not other years, on account of drift ice." I think the non disturbance for the last few years of the spawning grounds at Little Saskatchewan has also a great effect. I find the fishermen in my district very particular in disposing of their culled fish, cleaning them up and putting them ashore.

There are more fish used for home consumption in this district than any other as there are in the neighbourhood of 200 families of Indians on the shores who live almost entirely the year round on fish. The catch is as follows:—

Whitefish.....	212,800 lbs.
Pickerel.....	208,800 "
Sturgeon.....	61,848 "
Mixed fish.....	660,000 "
Value.....	\$27,096 40

Of this 45,000 lbs. of sturgeon and the 660,000 lbs. of mixed fish, I estimate for home consumption. The balance for export.

LOWER RED RIVER AND HEAD OF LAKE—WILLOW POINT TO BROKENHEAD.

There is a lot of winter fishing done in this district, principally in the Red River delta and the St. Peter Indian reserve. Principal catch being pike, pickerel, catfish, sturgeon, gold eyes and perch. Only a stray whitefish is caught, the water

being shallow and marshy. The catch this year has been larger than usual. All the fishing is done through the ice in winter with the exception of a few small nets by the Indians during summer for their own use—and then only in the river when 20 yards or so is set to catch a few gold eyes, catfish and an odd pike. No whitefish are caught in this district nor do they come into the Red River to spawn. Wm. Hughes, overseer for this district, reports the law well observed and the catch as follows:—

Pickarel.....	59,400 lbs.
Pike.....	164,000 "
Perch.....	34,000 "
Catfish.....	112,000 "
Mixed and coarse.....	513,000 "
Value.....	\$7,036 00
Value 1895.....	5,896 50
Increase.....	\$1,139 50

UPPER RED RIVER.

There is little fishing on the river except with hooks set on night lines, catfish being the largest catch, a good many gold eyes are taken, and a carp, called bass here for a better name.

Five seine nets are used in the river near Winnipeg, the catch being sold in the city each morning as taken from the nets through the previous day, the fish being held in pens on the river bank alive until disposed of. These fish are disposed of cheaply, principally to the foreign element of the city. The catch is as follows:—

Whitefish.....	200 lbs.
Sturgeon.....	3,400 "
Carp.....	16,000 "
Pickarel.....	19,000 "
Catfish.....	18,000 "
Mixed fish.....	560,000 "
Value.....	\$1,990 00

LAKE MANITOBA.

Totogan to Long Point.

Daniel Devlin, overseer for this division, says: "In submitting my annual report for the year 1896, I beg to state that I visited all the principal fishing grounds in my district from St. Laurent to Totogan in May, October and November, seeing that the close season was observed, also collecting license fees.

During my tour of inspection I found that the fishery regulations were observed by the fishermen.

The fishermen, who are using seines, consider that the license fees are too high, as those nets are used only about three months in the summer beginning about the 20th of May to 15th of July, and again from the 1st of September to the 15th of October, and several days of these periods they are prevented working from stormy weather. Owing to the shortness of the fishing season and the \$50.00 price of seine

and \$25 for license and the low price paid for fish they wish me to report to you on this matter that the license may be reduced to \$15.00. The catch for this district for the season of 1896 was:—

	Pounds.
Whitefish.....	236,340
Pickereel.....	283,990
Pike.....	280,819
Tullibee.....	8,614
Salt pike.....	8,500
Mixed and coarse.....	15,000
Total value.....	\$20,147 98
Value—1895.....	12,933 03
Increase.....	7,214 95

LAKE MANITOBA—WEST SIDE. WHITE MUD TO NARROWS AND SANDY BAY.

Mr. Martineau writes as follows: "I beg to report that at different times during the year, and especially during the close season, I have visited all the fisheries and I am pleased to state that everything was in good order and condition and the fishing regulations strictly attended to, and to show the correctness of this statement I would here mention that even the Indians have given up fall fishing and are keeping the close season, not caring for fishing for the purpose of having hung fish." Mr. Martineau is Indian agent for Lake Manitoba and if other Indian agents would—as Mr. Martineau has done—try and induce the Indians to observe the close season and cease hanging fish in the spawning season it would be better for the Indians and their families in the future. The practice is no longer necessary.

Mr. Martineau further says: "In the past fishing was carried on only in winter, but this year ice-houses and freezers were built and a trial for summer fishing was effected and proved to be successful in so much as after expenses were paid the fishermen had a small profit and altogether the industry has proved of great help to them during the summer months when they could not obtain work elsewhere—and was of benefit to newcomers and settlers in general." The settlers would willingly welcome commercial fishing in the north end of Lake Manitoba where there are no settlers, and from the Narrows southerly where there are settlers kept for domestic fishing. Again Mr. Martineau says: "All the fishermen agree that the close season is too long and that the close season for whitefish should be say from the 1st day of October to the 10th day of November, which would cover the spawning season of the fish yearly, and they earnestly hope you will support them in such a fair request and urge upon the Minister of Marine and Fisheries the necessity of the change asked for, and they intend to send in a large petition to that effect shortly."

Catch—1896.	Pounds.
Whitefish.....	400,500
Pickereel.....	110,050
Pike.....	219,000
Tullibee.....	57,950
Mixed and coarse.....	234,300
Value.....	\$31,788 00
Value—1895.....	7,500 00

This great increase in this district is caused solely by the more vigorous prosecution of the fishing owing to the building of the freezer at Westbourne and the summer fishing, which for the first time has been carried on five miles out in the lake, in summer. The allowing 500 yards of net instead of 300 yards makes it possible for three or four men in a large boat to fish profitably.

FAIRFORD, LAKE ST. MARTIN AND LITTLE SASKATCHEWAN.

Mr. Martineau has acted as overseer in this district in addition to his own since the death of the late overseer Mr. Wood, and I would wish here to place on record the great pains and care Mr. Martineau has taken in the fishery work on Lake Manitoba, and I would respectfully suggest that the late Mr. Wood's district be permanently added to that of Mr. Martineau with a temporary guardian at Fairford during the close season for whitefish. The catch in this district was :—

Whitefish.....	45,000 lbs.
Pickereel.....	10,000 “
Pike.....	50,000 “
Tullibee ..	13,000 “
Coarse and mixed.....	50,000 “
Value	\$4,440 00

LAKES DAUPHIN AND WINNIPEGOOSIS AND WATER HEN RIVER.

J. H. Adams, overseer, says :—“The catch this year was 462,000 lbs., valued at \$761,750. The quantity sold in Canada and United States was 65·36 per cent of the whole catch. The larger catch this year is principally due to the construction of the Dauphin Railway and the advance of settlement in this district. I have reason to believe that the close seasons were fairly observed. Hereafter with a view to increase the development of our fisheries in this district, I beg to recommend that commercial licenses in the southern half of Lake Winnipegosis be granted to fishermen.” I cannot agree with this officer's recommendation. There are many settlers going in about the southern end of this lake, enough to do all the fishing required there. If a proposition for commercial fishing were entertained it should be at the least restricted to that part of the lake lying north of Birch Island. This lake is practically unfished as yet, and as the railway will in all probability be carried to the lake next year a large amount of fishing may be looked for. It is yet a question as to the number of whitefish in the lake and this can only be found out by actual test and exploration.

The lake for a western lake is fairly deep, being deeper than Lake Manitoba, and presumably whitefish are plentiful in the northern part. It is proved they are so in the part south of Birch Island. There can be no question of the value and I might say exhaustless quantities of the spring spawning species of fishes in the lake did I not know the word “exhaustless” never can properly apply to any of our waters. Lake Winnipegosis is the drainage basin for the Riding, Duck and Porcupine Mountains and sharing with the Carrot River the drainage of Pasquia Hills. Numberless streams run through the valleys and gulches of these mountains and every one of these streams is spawning ground in the spring for millions of pike, pickerel and suckers. Such lakes as Dauphin, Swan and Red Deer also being immense spawning beds. There is, I estimate, a greater area of spawning ground tributary to this lake than all the other lakes of Manitoba twice over, and from the wooded hills and valleys more insect fish food found than in ten times the area of prairie streams. As a consequence the fish named are very numerous and of large size and in the best condition. I have seen no where else such large fat pike and pickerel.

The suckers are to numerous and it is a pity these pests could not be got rid of, although the whitefish are a smaller fish than those of Lake Manitoba, the fishermen are using 6 inch extension measure gill-nets as in a smaller net the suckers gill, and being a strong fish and a great struggler in a net, they break the nets unless they have room to go through. The whitefish are smaller and darker than Lake Winnipeg whitefish and have not the sudden rise back of the head so prominent in those fish. They resemble the fish of Lake Manitoba though in a few brought in I noticed one

both as to colour and shape identical with the Lake Winnipeg fish, and it may be that some of the fish annually going up the Little Saskatchewan go on through Waterhen river to spawn in Winnipegosis :—

The area of Winnipegosis (square miles).....	2,011
Lake Dauphin	387
Swan and Pelican lakes	123
Red Deer lake	150
Total sq. miles.....	2,671
Height above sea	828 ft.
“ Lake Winnipeg.....	118 ft.

Mr. Adams reports the catch this year as follows :—

Whitefish	221,000 lbs.
Pickereel	37,500 “
Pike	59,000 “
Perch	10,000 “
Mixed and coarse.....	135,000 “
Value 1896	\$7,617 50
“ 1895	6,010 00
Increase	\$1,607 00

SOUTHERN MANITOBA.

Edmund Crayston, the fishery officer for this district, writes :— “This report includes the catch in Rock, Swan, Louise and Pelican lakes. I think the number of fish is increasing—both in number and size. There has been no wholesale slaughter among them with spears and forks for several years, that is why they are increasing. The close season has been pretty well observed in this section this year. The catch for 1896 was :—

Pike.....	80,000 lbs.
Mixed and coarse fish.	20,000 “
Value.....	\$3,000 00
Increase of fish caught over 1895.....	20,000 lbs.

There have been some American farmers coming over the border for a days rod and line fishing in these lakes, but as our settlers do not object, they being neighbours, on reference to the department last year regarding it they have been allowed to fish as a courtesy.

In conclusion I beg to say that the utmost care must be taken to maintain the fishing in these shallow lakes, to encourage settlement, the settlers not to live by fishing alone but as a means of getting a part living the first years of settlement, and keeping commercial fishing to the parts of the waters uninhabited.

All of which is respectfully submitted.

I have the honour to be, sir,

Your obedient servant,

R. LATOUCHE TUPPER,
Inspector.

MANI

RETURN of the Number and Value of Vessels, Boats and Fishing Material, the District extending from Manitoba

Number.	LOCALITY.	VESSELS AND BOATS EMPLOYED.						FISHING MATERIAL.						
		Vessels or Tugs.				Boats.		Gill-Nets.		Freezers and Icehouses.		Piers and Wharves.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Fathoms.	Value.	Number.	Value.	Number.	Value.	
			\$		\$		\$		\$		\$		\$	
1	Commercial fishing, Lake Winnipeg	12	1606.60	104100	58	23	3450	181	47600	8600	22	86000	13	5100
2	Lower part of Red River and Lake Winnipeg to Willow Point, west, and to Brokenhead, east					47	530	63	9150	835				
3	Lake Winnipeg, east side Brokenhead to Doghead.....					173	1730	204	30300	3030	1	600	1	20
4	Lake Winnipeg, west side (Gimli District) Willow Point to Doghead.....					140	1835	200	48700	4870	14	1500		
5	Upper Red River District.....					5	50	10						
6	Southern Manitoba													
7	South Lake, Manitoba, Totogan to Long Point.....					23	230	44	22000	1100				
8	Little Saskatchewan and Lake St. Martin					55	675	110	13200	1320				
9	The Narrows Ebb and Flow Lake, and west side Lake Manitoba					144	2335	247	28950	2312	9	5800	2	150
10	Lakes Winnipegosis, Dauphin and Waterhen.....					61	408	130	10800	1080				
11	Doghead, north, east and west sides of Lake Winnipeg.....	1	25.00	1200	6	4	555	61	17500	1750				
	Totals	13	1631.60	105300	64	675	11798	1250	228200	24897	46	93900	16	5270

T O B A .

Number of Men employed, &c., with the Kinds and Quantities of Fish, in the and Keewatin, for the Year 1896.

		KINDS OF FISH.										VALUE.		
Number.	Seines.	Whitefish, fresh or frozen, lbs.	Pickeral or Doré, lbs.	Pike, lbs.	Bass, lbs.	Sturgeon, lbs.	Tullibee, lbs	Perch, lbs.	Catfish, lbs.	Mixed fish, lbs.	Home consumption, lbs.			Number.
	Value.											\$	cts.	
...	...	3270320	94430	10576	...	...	...	...	...	...	...	166,560	42	1
...	...	...	59400	164000	...	...	...	34200	112000	51300	22306	7,483	12	2
...	...	47500	235700	63100	...	110500	...	6600	30000	244200	350000	26,041	00	3
...	...	140000	260000	...	...	...	230000	...	18000	206000	...	21,640	00	4
5	200	200	19000	...	16000	3400	...	...	18000	56000	...	1,970	00	5
...	...	...	...	80000	...	...	...	...	...	20000	100000	3,800	00	6
6	300	236340	383990	289319	...	...	8614	...	...	15000	70000	30,845	36	7
...	...	45000	10000	50000	...	...	13000	...	...	50000	106000	6,430	00	8
...	...	400500	110050	219000	...	...	57950	...	...	234300	356550	38,339	50	9
...	...	221000	37500	59000	...	...	...	10000	...	135000	250000	19,805	00	10
...	...	212800	208800	...	...	61848	...	...	...	660000	640000	39,396	40	11
11	500	4573660	1418870	934995	16000	175748	309564	50800	178000	1671800	1894856	362,310	80	

NOTE.—On line No. 1 over 1,000,000 lbs. of whitefish were shipped fresh, and the balance frozen.

RECAPITULATION

Of the Yield and Value of the Fisheries of **Manitoba**, for the Year 1896.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Whitefish Lbs.	4,573,660	0	05	228,683	00
Pickarel	1,418,870	0	03	42,566	10
Pike	934,995	0	02	18,699	90
Bass	16,000	0	03	480	00
Sturgeon	175,748	0	05	8,787	40
Tullibee	309,564	0	02	6,191	28
Perch	50,800	0	01	508	00
Catfish	178,000	0	01	1,780	00
Mixed fish	1,671,800	0	01	16,718	00
Home consumption	1,894,856	0	02	37,897	12
Total for 1896	11,224,293			362,310	80
do 1895	9,170,048			250,776	00
Increase	2,054,245			111,534	80

STATEMENT of Fishing Material in **Manitoba**, for the Year 1896.

Material.	Value.
	\$ cts.
13 fishing tugs, 1,631 tons, 64 men	105,300 00
675 do boats, 1,250 men	11,798 00
228,200 fathoms gill-nets	24,897 00
11 seines	500 00
46 freezers and ice-houses	93,900 00
16 piers and wharfs	5,270 00
Total	241,665 00

APPENDIX No. 9.

NORTH-WEST TERRITORIES.

REPORT ON THE FISHERIES OF THE NORTH-WEST TERRITORIES, FOR
THE YEAR 1896, BY THE INSPECTOR G. S. DAVIDSON.

FORT QU'APPELLE, ASSA., N.-W. T., 2nd January, 1897.

HON. L. H. DAVIES,
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit my report for the past year.

Owing to the vastness of the territory and the advanced state of the season when I took office I have been able to make a personal inspection of only those districts situated in the immediate vicinity; but trust to make an extended tour in the early spring.

The regulations relating to the close season have on the whole been well observed and with the exceptions of Devil's Lake, the Saskatchewan River and white-fish in Crooked Lakes the stock of fish shows a general increase, although the catch has been larger than usual.

I am of opinion that in the far north it is impracticable and unnecessary to rigorously enforce those restrictions so vitally important to the fisheries contiguous to thickly populated districts, or commercial centres. Many of the lakes are surrounded by *muskegs*, twenty and thirty miles in extent and totally unapproachable except during the fall and winter months, it being necessary to leave early owing to the impassable nature of the country at other seasons of the year.

I am indebted for some valuable information regarding the brook-trout in the Macleod and Kootenay districts to the courtesy of Major Steel and Inspector Casey who sent me a box of trout caught on 9th October last, which arrived in good order. They were with spawn and in prime condition.

Inspector Casey informs me that from his own experience and that of sportsmen in the neighbourhood they are to be found with spawn during all months of the year, and recommends that the close season should be established from the first formation of the ice in the creeks until the break up in the spring.

I hope soon to have some further information anent the lake fish of these waters, those in many of the fish being unable to reach the lakes for spawning.

There is abundant evidence that all these western streams are teeming with trout, speckled, hog-backed, and bull; eighty to one hundred being an ordinary day's catch with a rod and line. And should, now that the mining wealth of these districts is attracting so much attention, prove an alluring feature to the tourist and the sportsman.

Your officers have received much assistance in the discharge of their duties and much valuable information from time to time from the members of the North-west Mounted Police whom we invariably find both able and willing to afford courteous and efficient service.

EDMONTON DISTRICT.

W. D. Matheson, overseer in this division, reports an especially large catch in several of the lakes, owing to the settlers having been permitted to fish during the close season, the larger portion having been then taken, and recommends that

the close season be enforced and a policeman be placed in charge in preference to appointing local guardians. There is already a police detachment stationed at "The Landing" and a constable might be sent from thence to those points requiring special care.

LAC LA BICHE.

The catch in this lake has been larger than usual. Eighty per cent of the forty residents find employment with the Hudson's Bay Co. during the summer, and can catch fish during the winter if so inclined; it is therefore recommended that the close season be rigorously enforced.

BEAVER LAKE, NORTH.

At this lake matters are in a similar condition to these at Lac La Biche.

WHITEFISH LAKE.

This lake is under the management of Mr. John Ross, of Saddle Lake. The close season has been well observed, both Mr. Ross and the Revd. E. B. Glass, using their influence to secure such observance.

BEAVER LAKE, SOUTH.

There is a large amount of coarse fish in this lake, and the late Mr. Gilchrist directed that little attention should be given to it; there have, however, been several complaints regarding the destruction of fish during the close season, which were unfortunately received too late for any action to be taken in the matter.

LAKE ST. ANNE.

The fish in this lake are of a better quality than those in the lakes on the north side of the river.

Owing to the poverty of the settlers free permits were issued for domestic fishing, but no fish have been allowed to be marketed.

There was a guardian appointed during the close season of forty days, and all the regulations were observed.

WHITE WHALE LAKE.

The fish are reported to be too numerous in this lake and the quality consequently inferior to those in Lake St. Anne. Indians and Half-breeds have been travelling from one lake to another, it is therefore recommended that free permits be issued to the settlers with a view to reducing the number of fish, and the residents be restricted to fishing on their respective lakes.

The Half-breeds strictly observed the regulations, but Paul's band of Indians were allowed fish during the close season.

LAKE LANOU.

Whitefish and coarse fish are very numerous in this lake, but there are no settlers in the vicinity. The fishing has been carried on by Indians from River Qui Barre Agency.

DEVIL'S LAKE.

The stock of fish here has been steadily on the increase owing to the fact that there are only three settlers and one Indian with net.

The regulations have been well observed.

PIGEON LAKE.

This is a magnificent sheet of water abounding in whitefish, pike, pickerel, and a considerable number of coarse fish; it is unquestionably the best fishing lake in this large and important district, as is evidenced from the fact that although the number of boats and canoes is much less than of those employed on other lakes the catch is much greater than the combined take of any other four.

Owing to the existence of a considerable amount of jealousy the settlers exercise a reciprocal watch over each other and to a great extent act as their own guardians. Domestic licenses have however been abused by turning them to commercial purposes, and, Mr. Matheson recommends that the fees for licenses to white men on this particular lake be raised without allowing nets of a larger capacity; this he is of opinion would tend to check the abuse.

BAPTISTE LAKE.

This lake is situated about twelve miles south-west of Athabaska Landing and contains only tullibee.

Great destruction of fish is reported to have taken place during the past two years; Mr. Matheson points out the facility with which this lake might be guarded from "The Landing," and foretells a speedy extinction of the fish unless some such steps are taken in the immediate future.

PRINCE ALBERT DISTRICT.

Fishery Overseer R. S. Cook, reports the regulations well observed in this district, no fines having been imposed, and only three nets seized.

The catch in Red Deer, Little Trout, Big Trout, Montreal and Pelican lakes are turning out exceedingly well, 343,000 lbs. of fresh fish having been shipped to the United States markets during the past year. One fisherman with 300 yards of net caught five tons of fish in fifteen days. A marked contrast to this is to be found in the lakes to the north-west of Prince Albert where for no apparent cause the fisheries are rapidly giving out; there is also a scarcity of rabbits in this locality which causes a heavier demand for fish amongst the native population.

The fisheries on the Saskatchewan also turned out a complete failure and the Saskatchewan Fish Co. has sustained a heavy loss in connection with sturgeon fishing.

Free permits were issued to the number of 143 to Half-breeds and Indians, and revenue (for license fees) amounting to \$192.00 was collected during the year.

LONG LAKE DISTRICT.

Fishery Overseer John Foster reports the close season to have been well observed by both white men and Indians, and there were no fines inflicted and no confiscations made.

For twelve years the waters of those lakes have been annually lowering one foot, but during the year past they have, in consequence of the large rainfall, risen about a foot. There being abundance of food the catch of whitefish has been larger than usual; but the take of pike and coarse fish has not been so great. This is, in the opinion of Mr. Foster, to be attributed to the fact that the fishing has been done in deeper water.

CROOKED LAKE DISTRICT.

Fishery Guardian Gerald Fitzgerald reports a fair catch of all fish except whitefish, which have almost disappeared from the lakes of this district, there being none in Crooked Lake, and only a few old ones in Round Lake, the presence of these being accounted for by the fact that there has been less small net fishing in the latter than in the former.

The placing of whitefish fry in these lakes would be of very material benefit to the settlers, being worth at least three times as much as mullet.

QU'APPELLE DISTRICT.

Fishery Guardian John Leader, jr., reports a rigid enforcement of the fishery regulations, to which fact may be attributed the universally plentiful supply of fish of all kinds.

KATEPWE LAKE.

In this lake the greater part of the fishing is done during the spring and autumn months in shallow water.

A supply of whitefish fry was placed in the lake some four years ago, and that fish is now particularly plentiful, being as great as at any time during the past twelve years.

There were 5 gill-nets, 3 spears and 2 ice lines seized during the year.

MISSION LAKE.

This lake has a good supply of pike, pickerel, tullibee, perch and suckers, and the catch of whitefish was larger than that of last year.

PASQUA LAKE.

A considerable increase in fish of all kinds is noted in this lake. A large number were killed by an electric storm in July last.

Only one licensed fisherman operated here this year.

WYOWASUNG LAKE.

This is the chief spawning ground for pike, pickerel and buffalo fish.

QU'APPELLE LAKE.

This is the principal fishing lake of the district; it was stocked with whitefish fry at the same time as Katepwe Lake, and the supply is abundant.

MACLEOD DISTRICT.

Fishery Guardian I. W. Short reports the laws regulating the close season and illegal netting and spearing to be observed and enforced.

All the dams are provided with fish-ways.

Mr. Short corroborates the statement of Inspector Carey, that trout are to be found with spawn at any time during the open season.

All the rivers, streams and lakes of this district abound in salmon-trout, pike, grayling, bull-trout and river-trout (or cut-throat), the latter appear to be very different from the ordinary brook-trout.

There are no fish exported from this neighbourhood and very little sold; the settler generally fishing for sport and consuming what he catches. An Indian may occasionally be seen offering fish for sale and the price is about 25 cts. for 3½ or 4 lbs.

MOOSE-MOUNTAIN LAKES.

These lakes, three in number, have until the recent appointment of Guardian W. V. Hill received no care. The regulations are reported to be now well observed, Mr. Hill being unable to find any one committing a breach of the law.

The lakes have a depth of water varying from ten to forty feet, and the bottom is largely composed of gravel.

One of the lakes situated on White Bear Indian Reserve has been almost entirely fished out, and it would be a great benefit to the settlers to have it stocked with fry. The only fish now found are pike and pickerel.

CANNINGTON LAKE.

This is a larger body of water and is well stocked with pickerel, pike and suckers.

BATTLEFORD DISTRICT.

As reported to the Department, I found it necessary to suspend the guardian of this district, and pending a reappointment I am without any report from this very important post; but I trust during my proposed visit in the spring to put matters straight.

CUMBERLAND HOUSE DISTRICT.

I have received no returns from this district.

PAS DISTRICT.

No returns received.

Herewith I append a statement of the fish caught and boats employed, nets used, etc., on the various lakes.

I have the honour to be, Sir,

Your obedient servant,

G. S. DAVIDSON,

Inspector.

NORTH-WEST TERRITORIES.

RETURN of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, &c., the Quantity and Value of Fish, in the District of Prince Albert, Saskatchewan Territory, for the Year 1896.

Number.	DISTRICTS.	FISHING MATERIAL.								
		Tugs.			Boats.			Gill-Nets.		
		Number.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.
			\$			\$				\$
1	Saskatchewan River.....	1	1,200	3	20	250	25	75	750	350
2	Green Lake.....				15	150	20	100	3,000	500
3	Assiniboine and others.....				15	150	20	70	2,000	325
4	Montreal, Red Deer, Trout, Sturgeon, Candle, &c.....				20	250	25	350	12,000	1,400
	Total.....	1	1,200	3	70	800	90	595	17,750	2,575

RETURN showing the Kinds of Fish in the District of Prince Albert, Saskatchewan Territory, for the Year 1896.

Number.	DISTRICTS.	KINDS OF FISH.							VALUE.
		Whitefish, lbs.	Trout, lbs.	Pickarel, lbs.	Pike, lbs.	Sturgeon, lbs.	Tullibee, lbs.	Gold Eyes, lbs.	
1	Beaver River.....	48000		20000	100000				\$ cts. 5,000 00
2	Green Lake.....	12000							600 00
3	Assiniboia Lake.....	24000			50000				2,200 00
4	Devils Lake.....	9000			1000				470 00
5	Big Whitefish and other small lakes.....	18000			5000				1,000 00
6	Montreal Lake.....								
7	Red Deer Lake.....								
8	Little Trout Lake.....								
9	Big Trout Lake.....	*213000	80000	15000	35000				15,800 00
10	Pelican Lake.....	†20000	8000		12000				1,640 00
11	Bittern Lake.....								
12	Dog Lake.....								
13	Candle Lake.....								
14	Saskatchewan River.....			1000	4000	42000	500	1200	2,232 00
15	Lakes South of South Saskatchewan River.....			1500	5000				145 00
	Total.....	344000	88000	37500	212000	42000	500	1200	29,087 00

The catch at Stanley, Ile à la Crosse and other lakes in the far north not included.

*Fresh fish exported to the United States markets. †Used for home consumption.

RETURN of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, the Quantity and Value of Fish in the District of Edmonton, Alberta, for the Year 1896.

Number.	DISTRICTS.	FISHING MATERIALS.					KINDS OF FISH.					VALUE.	Number.
		Boats.		Gill-Nets.			Whitefish, lbs.	Pike, lbs.	Tullibee, lbs.	Mixed and coarse fish, lbs.			
		Number.	Value.	Men.	Number.	Fathoms.					Value.		
			\$				\$					\$	cts.
1	Lac La Biche	50	750	50	200	5000	600	135000	5000	5000	5000	4,500	00
2	Whitfish Lake on Indian Reserve.	8	120	10	26	650	78	38000	1500	1000	1000	1,215	00
3	Beaver Lake near Lake La Biche	20	300	20	60	1500	180	32000	1500	1000	1000	1,035	00
4	Beaver Lake south of river								*60000	*10000	*10000	2,100	00
5	Lac St. Anne	18	180	24	30	750	90	100000	3000	8000	8000	3,330	00
6	White Whale Lake.	10	50	10	35	875	105	16000	1000	1500	1500	795	00
7	Lake Lanon.	4	40	5	20	500	60	8000		3000	3000	330	00
8	Devils' Lake.	1	5	1	3	75	9	500	200	300	300	30	00
9	Pigeon Lake.....	30	300	30	200	5000	600	480000	1000	3000	7000	14,730	00
	Totals.....	141	1745	150	574	14350	1722	809500	1000	75200	13000	28,065	00

* Caught during close season by means of pitch-forks, etc., see Reports.

RETURN of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and Boats, &c., the Quantity and Value of Fish, in the District of Prince Albert, Saskatchewan Territory, for the Year 1896.

Number.	DISTRICTS.	FISHING MATERIALS.						KINDS OF FISH.							VALUE.				
		Tugs.		Boats.		Gill-Nets.		Whitefish, lbs.	Trout, lbs.	Pickereel, lbs.	Pike, lbs.	Sturgeon, lbs.	Perch, lbs.	Tullibee, lbs.		Mixed and coarse fish, lbs.			
		Number.	Value.	Men.	Number.	Value.	Men.										Number.	Value.	
								cts.	cts.	cts.	cts.	cts.	cts.	cts.		cts.			cts.
1	Crooked Lake.	1	1200	3	231	2993	283	1393	38435	5343	5221100	88000	2079100	1389050	92000	15000	43900	2184500	383,232 00
2	Moose Mountain																		
3	Long Lake.																		
4	Eagle Quill Lake.																		
5	Qu'Appelle Lakes.																		
6	Prince Albert.	1	1200	3	70	800	90	595	17750	2575	344000	88000	37500	212000	42000	18400	500	1200	1,275 00
7	Edmonton.																		
8	Cumberland and other districts (Estimated).																		
	Total.	1	1200	3	231	2993	283	1393	38435	5343	5221100	88000	2079100	1389050	92000	15000	43900	2184500	383,232 00

RECAPITULATION

Of the Yield and Value of Fisheries in the North-west Territories for the Year 1896.

Kinds of Fish.	Quantity.	Value.
		\$ cts.
Whitefish.....	5,221,100	261,055 00
Trout.....	88,000	4,400 00
Pickarel.....	2,079,100	62,373 00
Pike.....	1,389,050	27,781 00
Sturgeon.....	92,000	4,600 00
Perch.....	15,000	300 00
Tullibee.....	43,900	878 00
Coarse and mixed fish.....	2,184,500	21,845 00
Totals.....	11,112,650	383,232 00
do for 1895.....		501,690 00
Decrease.....		118,458 00

STATEMENT of Fishing Materials in the North-west Territories, 1896.

1 fishing tug (3 men).....	\$1,200
231 fishing boats (283 men).....	2,993
38,435 fathoms of gill-nets.....	5,343
1 freezer.....	2,000
Total	\$11,536

RECAPITULATION

Of the Yield and Value of the Fisheries of Manitoba and the North-west Territories, 1896.

Kinds of Fish.	Quantity.	Value.
	Lbs.	\$ cts.
Whitefish.....	9,794,760	489,738 00
Pickarel.....	3,497,970	104,939 10
Pike.....	2,324,045	46,480 90
Sturgeon.....	266,748	13,387 40
Bass.....	16,000	480 00
Trout.....	88,000	4,400 00
Tullibee.....	353,464	7,069 28
Perch.....	65,800	808 00
Catfish.....	178,000	1,780 00
Mixed fish.....	3,856,300	38,563 00
Home consumption.....	1,894,856	37,897 12
Total.....		745,542 80
do for 1895.....		752,466 00
Decrease.....		6,923 20

RECAPITULATION
Of the Fishing Material used in Manitoba and the North-west Territories.

Material.	Value.
	\$ cts.
14 fishing tugs (1,655 tonnage) (67 men).....	106,500 00
906 do boats (1,533 men).....	14,791 00
266,635 fathoms of gill-nets.....	30,240 00
11 seines	500 00
47 freezers.....	95,900 00
16 fishing piers and wharfs.....	5,270 00
Total	253,201 00

APPENDIX No. 10.

BRITISH COLUMBIA.

ANNUAL REPORT ON THE FISHERIES OF BRITISH COLUMBIA FOR THE YEAR 1896, BY INSPECTOR JOHN McNAB.

NEW WESTMINSTER, 14th January, 1897.

Honourable L. H. DAVIES,
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit my annual statistical, tabulated report touching the quantities, and values, of the products of the fisheries of British Columbia, for the year 1896.

The season was a prosperous one,—the output of canned salmon for the province, was the largest in the history of the industry, and that of the Fraser River, the third largest on record, notwithstanding that it was what is known by canners and fishermen as an “off” year.

As shown in the appended tabulated statement A,—the pack of the Fraser River was 375,344 cases, or 18,016,544 1 lb. cans, and that of the whole province, 621,938 cases, or 29,853,056 cans of 1 lb. each; the largest previous pack was that of 1893, which amounted to 29,169,908 1 lb. cans, or 683,148 cans less than in 1896.

The halibut and sturgeon fishing industries are being conducted on a more satisfactory basis than formerly, the first named industry is capable of unlimited expansion, the catch during the year amounted to 2,276,556 lbs. 1,926,956 lbs. of which was exported to eastern markets. The catch of sturgeon for commercial purposes amounted to 380,500 lbs. dressed fish, 355,500 lbs. of which was exported to eastern markets. A large number of sturgeon are caught by settlers and Indians for domestic use, they are in greater demand each year, and the facility with which they can be caught by poachers in the lakes and sloughs,—by the use of the destructive brawl lines, renders their protection difficult, but of very great importance.

The catch of fur-seal skins for 1896 shows a large decrease, as compared with that of the previous year :—

Catch 1895.....	71,359 skins.
do 1896 ...	55,677 do

The prices of the skins are also much less than was obtained for the 1895 catch.

The capital invested in the fisheries in 1896, was \$2,614,578, an increase of \$578,143 over that of 1895.

The number of hands employed in canning, fishing and sealing, during 1896, was 15,925, against 14,485 in the previous year.

Shad are becoming plentiful in the Fraser River, and it will be necessary for your department to formulate regulations governing their catch.

The lobsters and oysters sent to Vancouver by your department last season, reached their destination, and were planted in various suitable places in fairly good condition. I have visited three beds, and handled some of the oysters several times since they were planted; they were in good condition, and the young oysters attached to the shells were increasing in size.

The present fishery regulations give every general satisfaction, and my guardians in the different districts, reported that they were fairly well observed.

I have, sir, the honour to be,

Your obedient servant,

JOHN McNAB,

Inspector of Fisheries.

A.—SCHEDULE of Salmon Canneries in British Columbia, Season 1896.

Owner or Agent.	Name of Cannery.	Packed in 1-lb. Cans.
<i>Fraser River.</i>		
A. Ewen & Co.	Ewens.	972,720
Westham Island Packing Co.	McDonald Bros. & Co.	274,752
Lam Tung.	Westminster Cannery.	295,680
N. H. Bain.	Pacific Coast.	428,544
Walter Morris.	Federation.	703,776
Malcomb & Windsor.	Malcomb & Windsor.	1,081,248
Costello & McMorren.	Star.	585,600
Fisherman's Canning Co.	Fisherman's.	470,784
J. A. Hume & Co.	J. A. Hume.	312,000
Bon Accord Fishing Co.	Sea Island.	580,000
Short & Squire.	Imperial.	529,440
Hennessy & Alexander.	Canadian Pacific.	483,312
Victoria Canning Co.	{ Delta.	1,056,000
	{ Harlock.	816,000
	{ Holly.	480,000
	{ Wellington.	480,000
Rowan Bros.	Terra Nova.	472,960
Hobson & Co.	Atlas.	289,440
J. H. Todd & Son.	Richmond.	513,024
do.	Beaver.	541,632
Provincial Canning Co.	Provincial.	271,824
Brunswick Canning Co.	Brunswick.	454,560
Boutilier & Co.	Boutilier's.	360,000
Fraser River Industrial Co.	Industrial.	338,400
Alliance Canning Co.	Alliance.	230,400
Good Murphy & Co.	Dinsmore Island.	432,000
McPherson & Hickey.	McPhersons.	369,600
M. Costello.	Fraser River.	384,000
Anglo-American Canning Co.	Anglo-American.	408,000
H. Bell-Irving & Co.	{ Britannia.	2,968,848
	{ Wadhams.	
	{ Camu Pass.	
	{ British American.	
P. Birrell.	Phoenix.	432,000
	British Columbia.	
<i>Skeena River.</i>		
Carlisle Packing Co.	Carlisle.	652,800
Royal Canadian Packing Co.	Royal Canadian.	518,900
Victoria Canning Co.	Standard.	304,000
Turner Beeton & Co.	Inverness.	533,712
British Columbia Canning Co.	Windsor.	504,000
Anglo-British Columbia Canning Co.	North Pacific.	504,000
do.	British American.	576,000
Cunningham & Son.	Skeena.	528,900
Turner Beeton & Co.	Balmoral.	576,000
<i>Naas River.</i>		
Federation Canning Co.	Naas Harbour.	703,152
do.	Mill Bay.	
<i>Rivers Inlet.</i>		
Brunswick Canning Co.	Brunswick.	840,000
H. Bell-Irving & Co.	Good Hope.	1,440,000
British Columbia Canning Co.	Victoria.	631,968
do.	Rivers Inlet.	1,267,536
Victoria Canning Co.	Wannock.	979,200
<i>Lowe's Inlet.</i>		
Cunningham & Rhude.	Lowe Inlet.	499,200

A.—SCHEDULE of Salmon Canneries in British Columbia, Season 1896—*Concluded*

Owner or Agent.	Name of Cannery.	Packed in 1-lb. Cans.
<i>Namu Harbour.</i>		
R. Drains	Namu.....	199,200
<i>Alert Bay.</i>		
A. S. Spencer.....	Alert Bay.....	137,184
<i>West Coast.</i>		
Clayoquot Fishing Co.....		239,760
West Coast Packing Co.....		2,400
RECAPITULATION.		
Fraser River, 375,344 cases, equal to.....		18,016,544
Northern Coast, 241,549 do		11,594,352
West Coast, 5,045 do		242,160
Grand total...621,938		29,853,056

Vessels.	Tons.	CREWS.		Boats.	Canoes.	PARTICULARS OF CATCH.				Total.	Remarks.	
		Whites.	Indians.			B.C. Coast.	Japan Coast.	Copper Islands.	Behring Sea.			
Ada.....	91	6	20	1	10					723	723	{ Seized in Behring Sea on the 5th August.
Agnes Macdonald...	107	25		10			545			282	827	
Ainoko.....	75	6	12	2	6	428				139	567	
Allie J. Algar.....	75	23		9			659	48		411	1,118	{ Seized in Behring Sea on 10th August. Seized in Behring Sea on 5th August.
Amateur.....	18		16		8	109					109	
Annie E. Moore.....	113	8	34	2	16	431				1,088	1,519	
Annie E. Paint.....	82	26		12			815			225	1,040	{ Seized in Behring Sea on 10th August. Seized in Behring Sea on 5th August.
Arietis.....	86	25		9			1,034			438	1,472	
Aurora.....	41	20		6			325	35		77	437	
Beatrice (Shanghai)..	66	6	26	2	13	381				532	913	{ Seized in Behring Sea on 5th August.
Beatrice.....	49	6	11	2	6	363				92	455	
Borealis.....	37	23		7			327			305	632	
Carlotta G. Cox.....	76	25		9			1,222			234	1,456	{ Seized in Behring Sea on 5th August.
Carrie, C. W.....	92	9	31	2	16	169				903	1,072	
Casco.....	63	22		7			808	202			1,010	
C. D. Rand.....	51	6	27	2	13					569	569	{ Seized in Behring Sea on 5th August.
City of San Diego.....	46	6	22	1	11	213				400	613	
Diana.....	50	18		6			997	95			1,092	
Director.....	87	23		7			893	183			1,076	{ Seized in Behring Sea on 5th August.
Dolphin.....	72	8	26	3	13	502				607	1,109	
Dora Seiward.....	93	10	32	2	16	377				826	1,203	
Doris.....	60	6	25	1	12					662	662	{ Seized in Behring Sea on 5th August.
E. B. Marvin.....	96	23		11			836			251	1,087	
Favourite.....	80	6	33	2	16	824				1,049	1,873	
Fawn.....	59	9	26	2	13	429				614	1,043	{ Seized in Behring Sea on 5th August.
Fisher Maid.....	21		9		4	63					63	
Florence M. Smith..	99	27		11						271	873	
Fortuna.....	97	24		7			534	174			708	{ Seized in Behring Sea on 5th August.
Geneva.....	92	26		8			499	451			950	
Ida Etta.....	69	22		9			659	13		370	1,033	
Kate.....	58	7	25	2	12	204				318	522	{ Foundered on sea with 207 skins.
Katharine.....	81	20		6			215				215	
Killermy.....	18	4	12	1	6	100					100	
Labrador.....	25	7	10	2	5	91				308	399	{ Seized in Behring Sea on 5th August.
Lebby.....	92	8	28	2	14	502				593	1,095	
Mary Ellen.....	63	6	24	3	11					536	536	
Mary Taylor.....	43	19		6			383			137	520	{ Seized in Behring Sea on 5th August.
Mascot.....	40	6	16	2	7		192			416	609	
Maud S.....	97	10	20	3	11					602	602	
Mermaid.....	73	25		8			940			345	1,285	{ Seized in Behring Sea on 5th August.
Minny.....	46	6	20	2	10	486				484	970	
Ocean Belle.....	83	18	13	3	10		584			316	900	
Ocean Rover.....	55	7	18	2	9					602	602	{ Seized in Behring Sea on 5th August.
Oscar and Hattie..	82	9	28	3	14	353				589	942	
Osprey.....	40	8	10	3	5					200	200	
Otto.....	86	9	25	2	12		719			501	1,220	{ Seized in Behring Sea on 5th August.
Pachwillis.....	20		20		10	152					152	
Penelope.....	70	6	25	2	12	458				894	1,352	
Pioneer.....	66	24		7			849	44		375	1,268	{ Seized in Behring Sea on 5th August.
Sadie Turpel.....	56	9	20	4	8		582			281	863	
San Jose.....	31	7	18	2	10	230				605	835	
Sapphire.....	109	9	40	3	18	418				1,002	1,420	{ Seized in Behring Sea on 5th August.
Saucy Lass.....	38	6	22	1	11	471				555	1,026	
Selma.....	21	3	10	1	5					185	185	
South Bend.....	21	4	10	1	5	70				359	429	{ Seized in Behring Sea on 5th August.
Teresa.....	63	10	15	2	9		231			483	714	
Triumph.....	98	14	23	5	12		606	20		750	1,376	
Umbrina.....	99	25		10			742	41		298	1,081	{ Seized in Behring Sea on 5th August.
Venture.....	48	6	16	2	8	269				442	711	
Vera.....	60	22		7			572			264	836	
Victoria.....	63	8	22	2	11	164				901	1,065	{ Seized in Behring Sea on 5th August.
Viva.....	92	26		7			607			70	677	
Walter L. Rich.....	76	8	27	2	13	93				399	492	
Zillah May.....	66	9	22	3	11					821	821	{ Seized in Behring Sea on 5th August.
Total.....	4,222	809	889	263	442	8,350	17,968	1,306	25,700	53,324		
Indian canoe-catch on the B. C. coast.....										2,353		
Grand total.....										55,677		

C.—Return showing the Number, Tonnage and Value of Vessels and Boats, and the Number of Men engaged in the Fisheries, Quantity and Value of Fishing Materials, Kinds and Quantities of Fish, &c., in the Province of British Columbia, for the Year 1896.

Number.	Districts.	VESSELS AND BOATS EMPLOYED.				FISHING MATERIALS.				KINDS OF FISH AND FISH PRODUCTS.					Number.				
		Vessels.		Boats.		Gill-Nets.		Seines.		Sturgeon Lines and Nets.		Salmon, brls.	Salmon, fresh, lbs.	Salmon, smoked, lbs.		Salmon, in cans.	Sturgeon, lbs.		
		Number.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Fathoms.	Value.							Value of Scoops.	
1	Fraser River District.	43	193300	115	2621	124030	9607	396900	295425	2000	3000	14566	7012	793	902595	8000	18016544	355500	1
2	Rivers Inlet District	4	21000	14	372	11160	1532	75000	56250	310	465	1000	...	120	10500	5000	5295888	...	2
3	Skeena River District.	7	30700	20	460	13940	1760	115025	86250	1450	2175	3025	50	500	150000	750	5595312	...	3
4	Naas River District	5	2865	11	95	9850	410	21700	16275	...	1000	1000	100	200	10000	10000	703152	...	4
5	East Coast Queen Charlotte Island.	...	...	...	25	3750	110	3000	3000	250	375	...	1000	50	1500	2000	...	...	5
6	West Coast Queen Charlotte Island.	...	...	...	20	2000	60	1200	1200	300	450	...	300	...	...	...	...	...	6
7	Cape Scott to Comox	...	...	...	20	800	45	1500	1000	350	475	...	250	50	25000	600	...	...	7
8	Comox to Victoria.	60	12000	180	60	3600	120	3000	2000	4000	6000	...	3000	50	100000	5000	...	25000	8
9	Victoria to Cape Beale.	6	1800	18	25	1200	60	2001	1500	1000	1500	...	4000	150	25000	7500	...	...	9
10	Cape Beale to Cape Scott.	4	4750	15	20	800	150	2000	1500	680	1360	...	200	500	5000	2500	242160	...	10
Totals.....		129	266415	373	3718	164130	13854	618325	464400	10340	15800	19591	15912	2413	1229595	41350	29853056	380500	

C.—RETURN showing the Number, Tonnage and Value of Vessels and Boats, &c.—Province of British Columbia—Concluded.

Number.	DISTRICTS.	KINDS OF FISH AND FISH PRODUCTS.												VALUE.		Number.							
		Halibut, lbs.	Herring, lbs.	Herring, smoked, lbs.	Herring, salted, brls.	Oolachans, salted, brls.	Oolachans, fresh, lbs.	Oolachans, smoked, lbs.	Trout, lbs.	Assorted or mixed fish, lbs.	Smelts, lbs.	Codfish, lbs.	Skill, brls.	Fur seal-skins, No.	Hair seal-skins, No.		Sea Otter-skins, No.	Fish-oils, galls.	\$	cts.			
1	Fraser River District.	1926856	20000	4350	550	100	235000	1000	26500	125000	25000	100000	.....	.....	.....	.....	.....	2,047,751	70
2	Rivers Inlet District.	25000	5500	200	.....	135	10000	1000	500	1400	.....	5200	.....	.....	.....	.....	2000	537,953	80
3	Skeena River District.	20000	.....	.....	.....	250	10000	500	1000	.....	.....	.....	.....	.....	.....	4	2500	586,318	70
4	Naas River District.	8000	.....	.....	.....	500	45000	2000	1000	1000	.....	.....	.....	.....	.....	250	5000	86,002	70
5	East Coast Queen Charlotte Island.	25000	3000	3000	350	.....	.....	.....	.....	12000	.....	3000	.....	.....	.....	1000	25000	16,380	00
6	West Coast Queen Charlotte Island.	1500	1500	500	100	25000	10000	60	650	12	6000	8,007	50			
7	Cape Scott to Comox.	2000	6000	1000	.....	.....	.....	.....	.....	12500	10000	5000	5000	.....	.....	5	5000	8,655	00
8	Comox to Victoria.	233100	120000	10000	.....	75	60000	5000	13000	225000	25000	150000	.....	.....	200	.....	10000	58,955	00
9	Victoria to Cape Beale.	25000	10000	1000	.....	.....	.....	.....	5000	18000	.....	8000	.....	.....	.....	.....	1000	9,725	00
10	Cape Beale to Cape Scott.	10000	25000	1000	.....	.....	.....	.....	5000	8000	.....	6000	10	.....	200	.....	5000	35,141	00
Totals.		2276556	190000	21050	1000	1060	360000	9500	64500	425400	55000	287200	70	.....	3700	23	61500	3,394,900	40			
Catch of Canadian fur seal fleet.													55677							501,093	00
Oysters, \$4,800; clams, \$6,000; mussels, \$480; shrimps and prawns, \$4,000.								15,280	00
Crabs, \$18,000; abalones, \$600; isinglass, \$750.								19,350	00
Caviar, 2,780 lbs. at 30c., \$834; cans clams, 16,944 lbs. at 15c., \$2,541.60.								3,375	60
Estimated value of fish of various kinds consumed in the province and not included in the above.								250,000	00
Grand total.								4,183,999	00

D.—RECAPITULATION

OF the Yield and Value of the Fisheries of British Columbia, for the Year 1896.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Salmon, in one pound cans.....	Lbs. 29,853,056	0	10	2,985,305	60
do fresh.....	" 1,229,595			122,959	50
do salted.....	Brls. 2,413	10	00	24,130	00
do smoked.....	Lbs. 41,350			10,337	50
Sturgeon, fresh, dressed.....	" 380,500	0	05	19,025	00
Halibut, fresh.....	" 2,276,556	0	05	113,827	80
Herring, fresh.....	" 191,000	0	03	5,730	00
do smoked.....	" 21,050	0	10	2,105	00
do salted.....	Brls. 1,000	5	00	5,000	00
Oolachans, fresh.....	Lbs. 360,000	0	05	18,000	00
do smoked.....	" 9,500	0	10	950	00
do salted.....	Brls. 1,060	10	00	10,600	00
Trout, fresh.....	Lbs. 64,500	0	10	6,450	00
Fish, assorted and mixed.....	" 425,400	0	05	21,270	00
Smelts, fresh.....	" 55,000	0	05	2,750	00
Codfish, fresh.....	" 287,200	0	05	14,360	00
Skill, salted.....	Brls. 70	10	00	700	00
Fur-seal skins.....	No. 55,677	9	00	501,093	00
Hair-seal skins.....	" 3,700	0	75	2,775	00
Sea otter.....	" 23	175	00	4,025	00
Clams.....	Bush. 8,000			6,000	00
Mussels.....	"			480	00
Oysters.....				4,800	00
Clams, canned in one pound can.....	16,944	0	15	2,541	60
Crabs.....				18,000	00
Abelonies.....				600	00
Shrimps and prawns.....				4,000	00
Caviare.....	Lbs. 2,780	0	30	834	00
Isinglass.....				750	00
Fish oil.....	Galls. 61,500			24,600	00
Estimate of fish consumed in the province, and not included in the above.....				250,000	00
Total.....				4,183,999	00

E.—CAPITAL invested in Fisheries, and Fishing Material, in British Columbia, including the Fur-seal Fleet, Boats, &c., for the Year 1896.

Material.	Value.	Total.
	\$	\$
59 salmon canneries, complete	20,000	1,180,000
12 oil factories.....		38,000
4 freezers and cold storage.....		30,000
6 salteries		3,000
129 vessels.....		266,415
3,718 boats employed in fishing		164,130
618,325 fathoms of gill-nets.....		464,400
10,340 do seines.....		15,800
Scows and flat boats.....		19,591
Halibut and sturgeon fishing gear.....		15,912
		2,197,248
64 vessels employed in fur-sealing.....	379,980	
263 boats do do	26,300	
442 canoes do do	11,050	
		417,330
Grand total.....		2,614,578

Hands employed in boat fishing, curing and canning fish.....	13,854
do fishing vessels	373
Sailors and hunters in sealing fleet (white).....	809
do do (Indians).....	889
	15,925

APPENDIX No. II.

FISH CULTURE,

1897.

REPORT BY PROFESSOR EDWARD E. PRINCE, COMMISSIONER AND
GENERAL INRPECTOR OF FISHERIES FOR THE DOMINION
OF CANADA, FOR THE YEAR 1897.

To the Honourable Sir LOUIS H. DAVIES, K.C.M.G., &c. &c.
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to present my annual report upon the work of fish-culture carried on in the department's hatcheries during the year 1897. The particulars of this work are given in the individual reports, which follow, of the officers in charge of the various establishments devoted to the artificial propagation of fish, and it is only necessary to point out that the very satisfactory condition of things, which I have been able to report for several seasons past, has been fully maintained during the year. By reference to the table on page 244 it will be seen that the number of fry successfully hatched of the various species, salmon, whitefish, lake-trout and lobsters is highly satisfactory, in view of the unavoidable fluctuations which of necessity occur in operations of this nature. It is to be remembered that two of the hatcheries, for special reasons, were not operated, while certain adverse circumstances in other hatcheries prevented the accomplishment of results such as I have in recent reports been able to announce.

In all fish-culture operations it is to be expected that from year to year fluctuations will occur. Thus in dry seasons the parent-fish are unable in many cases to reach their accustomed spawning grounds until so late a date that it becomes very difficult to secure them in ample numbers. Last season on the Fraser River there appeared to be a danger, due to this cause, of shortage in the supply of sockeye salmon eggs, as the water in Morris Creek (Harrison River) was very low. The inspector for the province reported that the creek was reduced to a series of shallow pools with gravel bars, rendering it impossible for the spawning fish to get to their accustomed haunts until very late in October, when the rainfall raised the water to its usual height. As a rule supplies of eggs are readily obtained at the end of September and early in October, but when the season is abnormally late the business of egg-collecting becomes hazardous and unsatisfactory. Fluctuations also occur in the abundance of parent-lobsters on the Atlantic coast and the Bay View lobster hatchery is in some seasons supplied with great difficulty. Last year spawning lobsters were by no means so plentiful as in the preceding season, though the quantity of eggs (about 100,000,000) obtained was ample, it was far below the supply of the previous season. The officer in charge of this hatchery referred in his report to the presence of ice, and the heavy gales which prevented the hauling of the traps, and it was not possible therefore to secure as many egg-bearing lobsters as before, but this year the scarcity of breeding lobsters is due to some cause which is not very apparent. It appears that while lobsters appeared to be very numerous on the usual fishing grounds, yet on those areas upon which the hatchery mainly relies for its quota of eggs, berried lobsters were very scarce. The local pack of

lobsters was, as a matter of fact, in excess of 1896, yet lobsters bearing eggs were very scarce during the whole season of 1897, and when the close time commenced there were less than 100,000,000 eggs in the hatching jars. This quantity is of course very large, but the fry planted were about ten per cent less in quantity than in 1896 and about forty-five per cent of the quantity planted in 1894 and 1895. It is possible that the continued capture of female lobsters season after season for canning purposes and for shipment alive is unduly diminishing their numbers as compared with the male lobsters. This is very possible as it is mainly the female lobsters that resort to the inshore shallows in order to take advantage of the warmer water to be found there. The eggs hatch out more favourably in shallow than in deeper water, and an excessive number of such berried lobsters bearing ripe eggs must of necessity be taken. If the males remain in deeper water during the months of June, July and August, it is possible also that large numbers of females which have not yet exuded their eggs, do so also, and the fishing operations now being carried on more extensively than formerly at greater depths, will destroy vast numbers of females, which unless carefully examined would be regarded as males. It is interesting to note that lobsters appeared to run much later than usual in the Straits of Northumberland (off Pictou County) and the fry hatched out of the eggs in the hatchery jars at a later date than in previous seasons.

As the table below demonstrates the operations carried on during the year have been highly satisfactory, and the output of fry is one which reflects credit upon the efficiency and industry of the officers in the various provinces who have this work in charge.

The following table shows the location of each hatchery, the quantities of fry distributed and the number of eggs shipped to other hatcheries either in an early state of incubation or in an advanced (semi-hatched) condition. The species of fish is specified in each case:—

No.	Name of Hatchery,	Number of Fry put out of Hatchery.	Number of advanced Eggs sent to other Hatcheries.	Number of advanced Eggs received from other Hatcheries.	Description of Fish.
1	Fraser River, B.C....	5,928,000	84,000	.....	Sockeye salmon.
2	Sydney, N.S.....	496,000	.....	500,000	Atlantic salmon.
3	Bedford, N.S.....	1,450,000	.....	300,000	do
	do	.....	.....	.....	.....
	do	4,000,000	.....	4,000,000	Whitefish.
4	Dunk River, P.E.I..	900,000	Not in operation	.....	.....
5	St. John River, N.B.	455,000	.....	500,000	Atlantic salmon,
	do	2,800,000	.....	3,000,000	Great lake trout.
	do	1,558,000	500,000	500,000	Whitefish.
6	Miramichi, N.B.....	2,100,000	750,000	.....	Atlantic salmon.
7	Restigouche, Que.....	1,100,000	.....	.....	do
8	Gaspé, Que.....	3,272,000	.....	.....	do
9	Tadoussac, Que.....	3,000,000	.....	3,000,000	Whitefish.
10	Magog, Que.....	1,500,000	.....	1,500,000	Great lake trout.
	do	1,500,000	2,500,000	.....	do
11	Newcastle, Ont ..	2,700,000	15,000,000	.....	Whitefish.
	do	72,000,000	.....	.....	do
12	Sandwich, Ont.....	2,920,000	.....	3,000,000	do
13	Ottawa, Ont.....	1,180,000	.....	1,200,000	Great lake trout.
	do	90,000,000	.....	.....	Lobsters.
14	Bay View, N.S.....	.....	Not in operation	.....	Whitefish.
15	Selkirk, Man.....	.....	.....	.....	.....
	Totals.....	198,859,000	18,834,000	17,500,000	.....

At the Miramichi hatchery it may be noted that a new departure has been made, and a batch of 30,000 brook trout (*Salvelinus fontinalis*) obtained with the co-operation of the provincial (New Brunswick) fishery authorities. The hatching

of brook trout has never been carried on to any extent in the department's hatcheries for the reason that these fish are regarded mainly as game fish and of less value therefore from a commercial standpoint:

The additional table which follows shows the total number of all the kinds of fry hatched and distributed from the several hatcheries since operations were commenced in each. This table has been compiled for the twenty-four years up to and including 1897.

STATEMENT showing the Places where, and the Years in which, the several Fish
Establishment, annually, since they

YEAR.	ONTARIO.			QUEBEC.			
	Newcastle.	Sandwich.	Ottawa.	Magog.	Tadousac.	Gaspé.	Restigouche.
	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.
1 1868-73..	1,070,000						
2 1874....	350,000						100,000
3 1875....	650,000				60,000	110,000	600,000
4 1876....	700,000	8,000,000			150,000	50,000	300,000
5 1877....	1,300,000	8,000,000			1,180,000	1,051,000	600,000
6 1878....	2,605,000	20,000,000			707,000	650,000	1,015,000
7 1879....	2,602,700	12,000,000			1,250,000	1,597,000	1,470,000
8 1880....	1,923,000	13,500,000			1,155,000	730,000	1,500,000
9 1881....	3,300,000	16,000,000		200,000	334,000	500,000	740,000
10 1882....	4,841,000	44,000,000		975,000	660,000	530,000	1,400,000
11 1883....	6,053,000	72,000,000		250,000	995,000	520,000	300,000
12 1884....	8,800,000	37,000,000		100,000	985,000	859,000	940,000
13 1885....	5,700,000	68,000,000		300,000	720,000	290,000	660,000
14 1886....	6,451,000	57,000,000		1,400,000	1,627,000	576,000	1,380,000
15 1887....	5,130,000	56,500,000		675,000	900,000	630,000	1,500,000
16 1888....	8,076,000	56,000,000		3,475,000	850,000	800,000	1,720,000
17 1889....	5,846,500	21,000,000		2,800,000	1,600,000	450,000	1,280,000
18 1890....	7,736,000	52,000,000	5,733,000	2,875,000	1,700,000	806,000	2,396,000
19 1891....	7,807,500	75,000,000	7,043,000	3,050,000	1,300,000	1,000,000	1,750,000
20 1892....	4,823,500	44,500,000	4,909,000	2,400,000	624,000	965,000	1,240,000
21 1893....	9,835,000	68,000,000	6,208,000	3,600,000	2,060,000	910,000	883,000
22 1894....	6,000,000	47,000,000	4,480,000	2,035,000	1,975,000	850,000	1,080,000
23 1895....	6,000,000	73,000,000	3,210,000	3,350,000	2,060,000	675,000	2,885,000
24 1896....	5,200,000	61,000,000	3,950,000	3,400,000	2,500,000	300,000	1,250,000
25 1897....	4,200,000	72,000,000	4,100,000	4,500,000	3,272,000	1,100,000	2,100,000
Totals..	117,000,200	981,500,000	39,633,000	35,385,000	28,609,000	15,949,000	29,089,000

Hatcheries have been erected; also the number of Fry distributed from each were built, including the year 1897.

NEW BRUNSWICK.		NOVA SCOTIA.			P. E. ISLAND.	BRITISH COL- UMBIA.	MANITOBA	TOTALS.
Mira- michi.	St John River.	Bedford.	Sydney.	Bay View Lobster Hatchery.	Dunk River.	Fraser River.	Selkirk.	
Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.
								1,070,000 1
60,000								510,000 2
150,000								1,570,000 3
60,000		395,000						9,655,000 4
320,000		1,000,000						13,451,000 5
665,000		1,400,000						27,042,000 6
1,025,000		1,740,000						21,684,100 7
805,000	170,600	730,000			500,000			21,013,700 8
770,000	50,000	680,000			375,000			22,949,000 9
640,000	588,000	850,000	315,000		1,060,000			55,805,500 10
925,000	72,600	800,000	659,000		1,210,000			83,784,600 11
795,000	811,000	1,000,000	853,000		1,000,000			53,143,000 12
900,000	155,000	670,000	772,000		1,100,000	1,800,000		81,067,000 13
945,000	2,181,000	960,000	1,179,000		400,000	2,625,000		76,724,000 14
900,000	2,479,000	4,230,000	1,415,000		500,000	4,414,000		79,273,000 15
1,290,000	4,142,000	4,390,000	1,559,000			5,807,000		88,109,000 16
850,000	3,570,000	3,850,000	2,034,500			4,419,000		47,699,000 17
1,022,000	3,492,000	3,860,000	1,953,000			6,640,000		90,213,000 18
1,503,000	3,165,000	2,550,000	1,000,000	7,000,000		3,603,800		115,771,800 19
1,310,000	2,378,000	2,620,000	690,000	63,500,000		6,000,000		135,959,500 20
975,000	3,299,000	3,180,000		153,600,000		5,764,000		258,314,000 21
1,010,000	4,096,000	3,805,000	238,000	160,000,000		7,800,000	14,500,000	254,919,000 22
1,200,000	4,060,000	3,815,000	195,000	168,200,000		6,390,000	19,000,000	294,040,000 23
1,430,000	4,068,000	4,225,000	243,500	100,000,000		10,393,000	4,500,000	202,959,500 24
1,558,000	4,155,000	5,450,000	496,000	90,000,000		5,928,000		198,859,000 25
21,108,000	42,912,200	52,200,000	13,652,000	742,300,000	6,145,000	71,583,800	38,000,000	2,235,586,200

The above totals show the number of fry or young fish actually hatched and distributed from the several hatcheries carried on under the department; but there are annually transferred from certain of the hatcheries newly spawned ova and advanced or semi-hatched eggs to other hatcheries. The hatchery at Bay View, N.S., is devoted wholly to lobster hatching.

I have had occasion to point out in a previous report that a stricter surveillance over the expenditure in the various hatcheries has been carried out. The results of the fish-culture operations have been far larger during the last four or five years than in any previous period, while with the exercise of greater economy there has been a considerable saving effected. In these efforts to reduce the expenditure, while at the same time the efficiency of work has not been allowed to decline, the co-operation of the officers in this service has been readily obtained and the results as is shown by the tables above referred to, and by the several reports of the officers in charge.

I have the honour to be,

Your obedient servant,

EDWARD E. PRINCE.

NEW WESTMINSTER, 1st December, 1897.

To Professor E. E. PRINCE,
Commissioner of Fisheries for Canada,
Ottawa.

SIR,—I have the honour to submit my report for the season of 1897, of operations in connection with the Fraser River fish hatchery.

On the 7th of January 84,000, semi-hatched Salmon Eggs (*O. nerka*) were shipped to Honolulu, Hawaii, in charge of Mr. Armstrong, of that place. From information received from Mr. Armstrong, after his arrival there, it appears, that although the eggs reached their destination in fairly good condition, yet they all perished before being placed in hatchery troughs. This result of a new and interesting experiment is very disappointing.

During the months of March and April, young salmon (*O. nerka*) were distributed from the Hatchery, and planted as follows:—

On March	8, Harrison River	2,628,000
do	29, Pit Lake	568,533
April	7, Harrison River	1,300,467
do	15, do	1,431,000
		<hr/>
		5,928,000

Making with the semi-hatched eggs a grand total output of 6,012,000.

On the 27th September, I sent Wm. Roxburgh, foreman, with two men, and the necessary supply of material, for building traps to capture parent salmon, and securing and shipping Ova, to Morris Creek, Harrison River, and on the 3rd of October I received at the hatchery. 1,186,000 Ova.

On the	5th, October	988,000	"
do	10th, do	704,000	"
do	13th, do	1,296,000	"
do	15th, do	1,152,000	"
do	18th, do	1,136,000	"
		<hr/>	

Making a total of 6,472,000

On the 18th I went to Morris Creek, when the last shipment of Ova was made, and closed the work there for the season.

The eggs are in fine condition, and I anticipate a successful season's operations. The boats and plant are being taken care of at the hatchery, and the trays will be lacquered, so as to prevent damage by rust.

I have the honour to be, sir,

Your obedient servant,

JOHN McNAB,

Inspector of Fisheries, and Officer in Charge of the F. R. F. H.

NORTH SYDNEY, C.B., 1st Decembar, 1897.

Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa, Ont.

SIR,—I beg herewith to submit my annual report on the operations of the fish hatchery located at Sydney, for the present year:—

On the 24th of March last I received at the hatchery from Mr. Sheasgreen, of Miramichi, N.B. hatchery, 500,000 salmon ova in excellent condition. These ova were carefully placed in the troughs and successfully hatched out, and on the 4th. of June I began liberating the young fry in the principal waters in Cape Breton. During the hatching process only a very small percentage of the eggs were found bad. The following are the counties, names of rivers and quantity of fry liberated in each river:—

Cape Breton County.

Trout River, Mira	35,000
East Bay River.....	25,000
Forks and Sydney Rivers.....	30,000
	<hr/>
	90,000

Victoria County.

North River, St. Anns	50,000
Clyburne River, Ingonish	40,000
North River, (Aspy Bay) ..	90,000
Middle River	20,000
	<hr/>
	200,000

Inverness County.

Margaree Rivers.....	140,000
River Dennis.....	30,000
	<hr/>
	170,000

Richmond County.

River Tom, Red Islands.....	36,000
	<hr/>
Total.....	496,000

The utmost care was exercised by myself and assistants in removing the fry to the rivers, and in liberating them in the most suitable places where they would be free from molestation by other fish. I had occasion to visit both the Middle and Margaree Rivers some thirty days afterwards, and I observed large schools of the young salmon in these rivers quite at home and full of vitality. In stocking the rivers above named I kept in view the drain on these rivers by gill-net fishermen for commercial purposes. Take for instance the adjacent sea coast and tidal waters of the Margaree River. In the season of 1896 there were 26,500 pounds of fresh salmon taken from those waters by gill-net fishermen and exported in ice. This present season the statistics will reveal, I have no doubt, a larger catch. Thus it will be seen the necessity of not only protecting the parent fish in the spawning season when they are ascending to the upper waters, but of stocking the rivers with fry from the hatchery.

Before the hatchery under my supervision can be again operated it will be necessary to have some extensive repairs made.

In a special report to the department, I gave an estimate of the cost of these repairs. I pointed out in that report the absolute necessity of the repairs being made before the hatchery is again operated. The department, however, informs me that it is unlikely that the hatchery can be supplied from abroad with ova for next season. If such is the case the repairs are not urgent.

Yet it is unfortunate that a supply of ova from the New Brunswick hatchery cannot be procured for next year. The ova received each year for the past three years from the neighboring province have given excellent satisfaction and the rivers stocked with the fry hatched out from this ova have each season since been literally alive with young salmon, so that practical results should be forthcoming next season, when these fish at the age of four years begin to make their appearance in the rivers which they left when one year old. The salmon fishery is becoming more important year by year in this Island. There are two establishments which now buy salmon from gill-net fishermen, freeze them and later in the season export these fish to the cities of Canada and the United States. Besides these establishments there are individual dealers who engage in the industry and buy salmon from neighbouring gill-net fishermen and export the fish in ice during the fishing season. Thus it will be seen the growing importance of this branch of the fishery and the necessity of keeping up the supply by stocking the rivers.

I have the honour to be, sir,

Your obedient servant,

A. C. BERTRAM,

Inspector of Fisheries.

BEDFORD, N.S., 1st Dec., 1897.

Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I beg to submit, herewith my annual report of the work at Bedford salmon hatchery for the season of 1897.

On the 7th and 11th November, 1896, 1,300,000 salmon ova were recieved from the Carleton, N.B. Pond, and again on the 24th April last, 300,000 semi-hatched salmon eggs were recieved from the Restigouche hatchery and on the 24th March last, 4,000,000 whitefish eggs were recieved from the Sandwich Ont. hatchery.

All of the above shipments were recieved in excellent condition, were hatched out early in the season, and planted between the 16th April and 12th June into the waters herein named.

Salmon.

Nine Mile River, Halifax Co.....	20,000
Pennant do do	60,000
Moose do Annapolis Co.....	180,000
Annapolis do do	125,000
Millville do do	125,000
Lahave do King's Co.....	125,000
Gaspereaux do do	125,000
Bear do Digby Co.....	80,000
Stewiacke do Colchester Co.....	125,000
West do Pictou Co.....	125,000
East do do	180,000
Caribou do do	60,000
Sackville do Westmorland Co N.B.....	60,000
Gaspereaux do do	60,000
Total	1,450,000

Whitefish.

Sandy Lake, Halifax Co	1,400,000
Williams Lake, do	1,400,000
Paradise Lake, Annapolis Co.	1,200,000
Total	4,000,000

It was my intention to plant a quantity of whitefish in the lakes of Cape Breton, Ainsley and Lake à Law, but was prevented from doing so on account of the roads being quite impassable and the steamers not running on the Bras d'Or Lake when the fish were ready for distribution.

The interior of the hatchery has been painted, the walls tinted, and the ceiling whitened, repairs made to the waste pipes and drains, new fascia boards and spouts placed all around the building, saddle boards put on, and the roof repaired where required, but as the roof is over 20 years old, it will require to be newly shingled in another year.

The work shop and storehouse has been newly shingled and is now in fair order.

I found it necessary to make two new floor troughs. The nursing troughs have been patched with tin and coated with paraffine varnish, so that they will probably last a while longer, but before long new ones must be constructed.

I am, sir, your obedient servant,

ALFRED OGDEN.

RAPIDE DES FEMMES ST. JOHN RIVER,
FISH HATCHERY, N. B., 1st December, 1897.

Professor EDWARD E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—In accordance with the rules of the department, and in compliance with your instructions: I beg leave to submit herewith my annual report of the operations done and performed at the Dominion Fish Hatchery under my supervision for the year now soon about to close.

As I have already in a former report referred to the operation of stripping the parent salmon in the Carleton pond, last autumn, it may not be necessary for me again to make any further report thereon; suffice it for me to repeat, that last November, there were placed upon the troughs in this establishment about eleven hundred thousand vivified salmon eggs: and in the month of March an additional supply was received from Sandwich, and Newcastle, Ontario, consisting in 3,000,000 whitefish and 500,000 salmon trout eggs, all of which did fairly well during the period of incubation, and hatched out a good percentage of live fry in the spring, and in due time they were planted in the following named rivers and lakes.

DISTRIBUTION OF WHITEFISH FRY.

Harvy Lake, York County.....	320,000
Bald head Lake do	320,000
Lake George do	320,000
Lake Yohoe do	320,000
Oromocto Lake do	320,000
Foster Lake, Charlotte County	320,000
Long Lake, Victoria do	320,000
Private Waters	240,000
	<hr/>
	2,800,000

DISTRIBUTION OF SALMON-TROUT FRY.

Latimore Lake, St. John County.....	40,000
Blackall's do do	40,000
Dick's do Kings do	40,000
Pleasant do do	40,000
Buttler's do do	40,000
Smith's do do	40,000
Magaguadavic Lake, York County.....	30,000
Dumphy's Lake do do	30,000
Shogomoc Lake do do	30,000
Long Lake, Victoria do do	60,000
Lawrence, Mass., U. S.	15,000
Turned out at the hatchery.....	50,000
	<hr/>
	455,000

DISTRIBUTION OF SEA SALMON.

Tobique River, Victoria County.....	100,000
Salmon do do do	130,000
St. John do do do	350,000
St. Croix do Charlotte do	200,000
Spruce Lake, St. John.....	80,000
Loch Alva, Queen's.....	40,000
	<hr/>
	900,000

RECAPITULATION.

Whitefish fry distributed.. .. .	2,800,000
Salmon-trout do 	455,000
Sea salmon do 	900,000

Total number of fry distributed. 4,155,000

It is most gratifying to me, and will no doubt be pleasing to you to know that the above large number of tender young fry were planted in the several waters herein designated without any appreciable loss, particularly when we consider the extremely long distance they had to be conveyed, you will very easily conceive the amount of care and attention it requires to be in a position to report such gratifying results of the years operations.

INCREASE OF FISH IN OUR WATERS.

It is now pretty generally conceded by all parties, but especially by the sportsmen that artificial fish culture, has not merely kept up the supply, but has caused a marked increase in the number of fish in our rivers and lakes, but to properly establish this fact, good protection is absolutely necessary, a thing, with the exception of the Tobique River, which has been somewhat neglected within his county. All of the foregoing brief report is most respectfully submitted.

I am, sir,

Your obedient servant,

CHAS. M. McCLUSKEY,
Officer in Charge.

MIRAMICHI HATCHERY, SOUTH ESK, N.B., 1st Dec., 1897.

PROF. E. E. PRINCE,
Commissioner of Fisheries,
Ottawa.

SIR.—I have the honour to submit my annual report upon the operations in connection with the Miramichi Fish Hatchery during the past year.

As stated in my last annual report, there was 1,648,000 native Miramichi salmon placed in this hatchery in the autumn of 1896. In addition to this number 280,000 ova were transferred from the Carleton Pond at St. John by Mr. Alex. Mowatts, making a total of 1,928,000 ova in this hatchery at the time of making my last report.

The 280,000 St. John salmon ova, although apparently in fair condition when placed in this hatchery, were utterly worthless, and became a total loss early in March, or just about the time that the embryo should begin to show active signs of life. I am of the opinion that this loss was caused by the rough passage they unavoidably received when they were being transferred from the railway to this hatchery. The roads were frozen very hard and rough at the time, and in all probability this rough passage rendered the ova worthless, although they did not all die immediately after being placed in the hatching troughs. The small loss usually experienced at this hatchery goes to show that these ova must have been injured in this way or in some other manner unknown to me previous to the time they were received here.

During the month of March, 500,000 Miramichi salmon ova were transferred in a healthy condition to the hatchery at Sydney, Cape Breton. These were replaced later on by 500,000 from the Restigouche Hatchery. The total loss during the

period of hatching, exclusive of the St. John ova mentioned above, amounted to only 90,000, leaving a balance of 1,058,000 Miramichi salmon fry and 500,000 Restigouche fry to be planted in the following streams:—

	Miramichi fry.	Restigouche.
North-west Miramichi.....	360,000	350,000
Main South-west Miramichi.....	150,000	50,000
Little South-west Miramichi.....	300,000	75,000
Sevogle River.....	150,000	.....
Renous River.....	75,000	.....
Stewart's Brook.....	23,000	.....
Totals.....	1,058,000	500,000

The fry were invariably planted in a healthy condition and on the best available planting grounds. 300,000 Restigouche fry were planted in the headwaters of the North-west Miramichi, near the Falls. This number is included in the above statement.

After the distribution of fry was completed, the work of putting all appliances in connection with the hatchery in thorough repair, was commenced. The supply pipes, which were considerably injured by the heavy frosts of the previous winter, near where they enter the supply tank in the hatching room, were repaired. The large scow used for towing purposes while procuring parent fish, was thoroughly overhauled and repaired, and several small scows for carrying the parent salmon from the fishing stations to the retaining pond, were built. The retaining pond was dredged and enlarged to nearly double its former size and is now fully capable of containing 600 fish. The interior of the hatchery was thoroughly cleaned and the troughs and trays varnished throughout.

CAPTURE OF PARENT FISH.

During the month of July, I was called upon to report, whether or not it would be possible to supply the St. John and Sydney hatcheries with ova from these rivers this year, as the Carleton pond was not in operation, and feeling confident that this could be accomplished if sufficient netting was put in operation, I answered in the affirmative. But later on instructions were received to proceed with the usual number of nets, and to use every exertion to procure as many fish as possible in order to assist in some measure in supplying the shortage of ova. As soon as these instructions were received and all necessary arrangements made, the work of procuring fish was commenced. Two set nets were put in operation—one on the North-west Miramichi River and another on the Little South-west Miramichi—and in addition to these, seining was carried on continually above the point where the set nets were situated. The operation on both rivers was very successful and satisfactory. The first fish were taken on September 14th. The total number of fish taken from that date until the nets were taken up on October 28th, was 455. Of this number, 305 were taken by means of the seine and set net on the North-west Miramichi, and the remaining 150 were taken in the set net on the Little South-west. The total number consisted of 230 females and 175 males. If the department had authorized the placing of nets on two of the other branches of this river, I have no doubt but that nearly double the number of fish could have been obtained.

COLLECTION OF OVA.

As the fish were in a strong, healthy condition when placed in the retaining pond, there was no loss met with this season. The majority of the female fish were large and gave a good yield of ova. The first fish were stripped on October 18th and the work continued at intervals until November 16th. The greater number of fish were not manipulated until after November 2nd. The total number of ova

procured was 2,020,000, showing an average yield to each fish of slightly over 7,200 eggs. This is the largest number of ova ever obtained at this hatchery in any one season since it was put in operation. Probably as many could have been obtained last year, but it was not considered necessary, as nearly all the other hatcheries were supplied and this one cannot accommodate over 1,500,000 with safety. Moreover the nets were kept in operation nearly two weeks later this season in order to get as many fish as possible to supply the St. John Hatchery. In accordance with instructions received I transferred 603,000 ova immediately after spawning to that hatchery. These ova were transported in good condition—leaving a balance of 1,417,000 in this hatchery at the present date.

During the month of August, I had considerable correspondence with D. G. Smith, Esq. Provincial Commissioner of Fisheries, regarding the matter of procuring a small supply of trout for breeding purposes. He assumed the undertaking of procuring the parent fish and succeeded in securing and placing forty large healthy fish in an inclosure in the stream that supplies this hatchery, where they remained until ready for manipulation. Mr. Smith obtained the fish in Bartibogue River by means of a small seine, and carried them from there to the hatchery, a distance of about 25 miles, in the large cans that we use for distributing salmon fry. Despite this long journey in comparatively small quarters, the fish were in splendid condition at time of manipulation. There were 25 females and 15 males from which I collected 30,000 ova, showing the average to each fish to be 1,200 eggs. These ova were placed in the hatchery immediately after being taken from the fish, and are progressing favourably up to the present with scarcely any loss. If this experiment is continued another year a more suitable inclosure will have to be provided for keeping the parent fish in after they are netted, until spawning time. This can be easily arranged at a small cost, as there is ample space in the retaining pond in which the parent salmon are inclosed.

In conclusion I may say that the hatchery and all appliances in connection therewith are in good condition and that no large outlay will be required during the coming year in order to keep everything in good running order. The past years operations have been very satisfactory and successful, and there is every reason to look for continued success in future.

Submitting all for your consideration.

I am, sir, your obedient servant,

ISAAC SHEASGREEN,
Officer in Charge.

RESTIGOUCHE HATCHERY, 1st Dec., 1897.

Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I beg to transmit herewith my 15th annual report upon the operations of the Restigouche Hatchery as conducted under my charge.

Three millions of eggs were laid down in the hatchery troughs in autumn of 1896, 750,000 of these were transported to the Miramichi and Bedford hatcheries in the semi-eyed stage during the month of April. The balance of the fry being distributed in the Restigouche and tributaries as follows:—

Kedgwick 70 miles from Hatchery.	250,000
Main Rest River between Hatchery and Kedgwick.....	800,000
Upsalquitch River.....	490,000
Metapedia do	550,000
Escuminac do	10,000
	<hr/>
	2,100,000
	<hr/>

Grand total semi-hatched eggs and fry, bred in hatchery 1897, 2,850,000. I have heard fishermen, guardians and scowmen say, the young fry were to be seen in great numbers along the various reaches of the river, where they had been artificially planted a short time previous. The young parr (two years old) on their emigration to the sea were never more numerous than they were this year. So much was this the case, they very often became a nuisance to the angler, and a great many are destroyed in this way.

The hatchery was thoroughly renovated during the past summer. All the trays and troughs washed, and re-varnished, and all decayed troughs re-placed with new ones and the institution put in proper condition for the reception of the ova this Autumn.

GOVERNMENT NETS AT HEAD OF TIDE.

The re-construction of the retaining pond began on the 15th of May, and although much damage was done to the plant caused by the great ice flow, the pond was made ready for the reception of the parent fish by 1st of June, and the two government nets immediately placed in fishing order, as soon as time would permit.

Below will be found a detailed statement of the numbers of fish caught, and dates upon which the nets were lifted and fished. These figures are taken from the two daily diaries which were kept, and can be relied upon as being correct.

Date.	Murray Island. Government Nets.	Pitts Creek. Government Nets.	Remarks.
June 4.....			Nets first set.
do 5.....	3		Never get any fish
do 6.....	0		from Saturday
do 7.....	0		night until Tues-
do 8.....	0		day morning.
do 9.....	7		
do 10.....	13		
do 11.....	7		
do 12.....	5		
do 13.....	0		
do 14.....	0		Sunday.
do 15.....	15		
do 16.....	4	4	
do 17.....	15	5	
do 18.....	7	2	
do 19.....	8	5	Sunday no fish until
do 20.....	0	0	Tuesday morning.
do 21.....	0	0	
do 22.....	25	9	
do 23.....	8	8	
do 24.....	9	7	
do 25.....	7	9	
do 26.....	22	0	
do 27.....	0	0	Sunday.
do 28.....	0	0	
do 29.....	27	4	
do 30.....	10	6	
July 1.....	9	5	
do 2.....	13	0	
do 3.....	14	5	
do 4.....	0	0	Sunday.
do 5.....	0	0	
do 6.....	0	2	
do 7.....	19	0	
do 8.....	0	2	
do 9.....	6	0	
do 10.....	2	0	
do 11.....	0	0	Sunday nets lifted
do 12.....	0	0	
do 13.....	7	0	
do 14.....	5	4	
do 15.....	0	0	
do 16.....	8	1	
do 17.....	3	1	
do 18.....	0	0	Sunday.
do 19.....	0	0	
do 20.....	0	0	
do 21.....	0	0	
do 22.....	0	0	
do 23.....	3	0	
do 24.....	1	0	
do 25.....	0	0	Sunday.
do 26.....	0	0	
do 27.....	2	0	
do 28.....	1	0	
do 29.....	0	0	
do 30.....	2	0	
do 31.....	2	0	
Total	289	78	Total... 367

It will be observed from the above table the nets are not set from Saturday night until Monday morning, and as no fish enter the small mesh nets in day time it only leaves five days in each week for actual fishing of the nets, which are regularly lifted each day when there are fish in them notwithstanding certain reports to the contrary. A loss of a few fish as usual occurred from the fungi growth after being deposited in the pond. So soon as it is discovered that an injured fish will not recover it is removed from the pond. In pure salt water ponds the fungus is killed in its first stage—but at Restigouche it is entirely fresh water where the fish are confined, and a few will be lost.

The gathering together of the fish and separating each sex into the divisions began on the 18th of October, and stripping on the 20th; 322 fish were manipulated, 182 females and 140 males; yielding—1,500,000 eggs. A large number of the female fish were under the ordinary size. I should say they were four year old salmon reproducing their species for the first time. Thus the average number of eggs per female was somewhat reduced. The eggs were carefully packed in the hatching trays at the pond, and safely conveyed to the hatchery by water, and deposited in the troughs in very fine condition. The manipulation of the fish continued up to 1st of November all yielding eggs, and were again returned to the river in good condition.

NEW PLANT REQUIRED ANOTHER YEAR.

The institution with all its equipment is in very fair condition, some slight repairs however will be necessary for another year. A few more new troughs and two new distributing crates for the fry, and perhaps a new supply pipe will be wanted.

TIDE HEAD POND.

A few new nets and a couple more pontoons with another fishing canoe, and 500 net stakes will be necessary. Total cost about \$100. This plant will be required for next spring's operations.

GENERAL REMARKS.

Canadian and United States newspapers made considerable reference to the poor run of salmon in the Restigouche this year. While it was an off year to a certain extent, there were some very good catches made, and upon the whole the anglers should be well satisfied. The following are a few of the scores made which by chance came under my notice, viz.:—

Mr. Frank Thompson and party in two weeks captured 50 salmon; J. S. Kennedy and party, Brandy Brook, 45; Messrs. Mitchell and Ayer, (not club members,) 87, Mr. Ayer, in one day, 12; Mr. Dawson's private waters produced 70; Mr. Leech and party on the Upsalquitch, 100 in two weeks, many weighing 25 pounds. Such large fish in the Upsalquitch is undoubtedly the direct results of the hatchery. I might instance many more good scores, but the above is sufficient evidence to show that there was a fair run of fish in the rivers, and all the guardians report a good showing of breeding fish on all the bars and shallows this fall.

When all the nets and all the angling is taken into consideration, one might well pause and ask how the balance of nature or salmon supply is to be maintained. It is no unusual occurrence to find 100 anglers scattered over the Restigouche and its tributaries at one time; each wanting eight fish per day, the limit fixed by the club. The fish are pursued to the very head waters of the streams even the Kedgwick and Patapedia were leased and fished this year.

Then there are nets upon nets extending 200 miles along the coast. The best catches of Restigouche salmon are now generally made at Green Point, on the Gulf outside the mouth of the Baie de Chaleurs. A few years ago there was not a

net within miles of this place. In addition to this, should some disturbing element such as an immense ice flow, as there was last year to change and upset the natural channels of the rivers and spawning beds, and crush millions of the one and two year old fish; again it has been clearly demonstrated that other larger fish and even the seals prey upon and break up schools of salmon in the sea, scattering them and entirely changing their course. This year the seals even followed the salmon forty miles up the river, and were seen quite late in the summer killing salmon in the pools. Is it any wonder then there would be an off year occasionally?

And now that angling has become such an extensive pursuit and the commercial value of salmon has reached such a high figure, being largely exported in the frozen state to the European markets, the question arises, what steps can best be taken to meet and offset these destructive devices conserve a most valuable fishery?

I would then urge such co-operation as may appear best, of Dominion and Provincial officers with the club guardians in the inland waters of the Restigouche, to maintain a better system of guardianship, as a certain amount of poaching is done on the heads of the rivers each year. I would also suggest that the output of fry from the hatchery be increased, as there is abundant evidence upon all sides that the hatchery has been the main factor of increasing and keeping up a uniform supply of salmon in the Restigouche and its tributaries during the past 10 years. I am also convinced it would be a wise policy to encourage the capture of trout and eels in the Restigouche at all times, as they are very destructive to the salmon.

Unless the above reforms are carried out, and if angling and netting go on without restriction, I fear the salmon fishery will decline in the future.

I am, sir,

Your obedient servant,

ALEX. MOWAT,
Officer in Charge.

GASPÉ HATCHERY, PROVINCE OF QUEBEC,
GASPÉ BASIN, 1st December, 1897.

Prof. EDWARD E. PRINCE,
Commissioner of Fisheries,
Ottawa.

SIR,—I beg to submit the annual report on the operations at Gaspé Fish Hatchery, for the year 1897. The ova remained in a healthy condition during the time of hatching. A loss of only forty thousand during the winter months being reported.

DISTRIBUTION.

Distribution commenced on June 10th and was completed July 13th. The fry were planted on the different grounds in a very healthy condition, as far up the river as possible. The fry were conveyed from the hatchery in canoes, and on account of slow means of transport much longer time was taken than would otherwise have been the case. Fry were distributed in the respective rivers, as follows:—

Dartmouth River.....	600,000
York “	200,000
St. John “	300,000
Total.....	<u>1,100,000</u>

REMARKS.

In connection with the hatchery, I may say that the necessary repairs were carried on as usual, until orders were received to cease work for this season. The interior of the building was cleaned and the work generally done.

On application for the necessary supplies, amounting to \$69 for preparation for the catching of parent fish, your department proposed that instead of securing the necessary supplies of eggs as heretofore by the capture of parent fish by the use of the trap-net, that they should be shipped from the Restigouche or Miramichi hatcheries, but as no eggs could be obtained from the places above mentioned there is no supply of eggs this winter.

In preparation for the operations next spring, I would strongly recommend that a stand of nets be purchased near the mouth of the Dartmouth River so that the required number of parent fish might be captured.

I would also recommend that the necessary repairs to the hatchery should be completed during the winter months.

I am, sir, your obedient servant,

HENRY DAVIS,
Gaspé Hatchery.

TADOUSSAC, 1st December, 1897.

Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit my annual report upon the operations of the Tadoussac Hatchery.

A successful hatch of salmon fry resulted from the largest crop of eggs ever collected for the Tadoussac Hatchery in the fall of 1896, and the distribution was made as follows:—

Ste. Marguerite River.....	512,000
Baude “	560,000
Chisholm “	992,000
A Mars “	200,000
Jacques Cartier “	150,000
Murray “	40,000
Mowat's Lakes.....	768,000
Hatchery “	50,000
Total.....	3,272,000

The largest part of the salmon fry has been carried to the rivers by carters, and a small part by the Richelieu Company. It has been impossible to make any arrangement, as usual, with Mr. Sturton for the services of his tug boat “Forest.” The Murray River has only received a portion of the fry, on account of the late date of the requisition and the instructions sent to me late in the season. It is impossible to make a large distribution of fry in the Upper Saguenay River by the Richelieu boats, we lose too much time, we require a tug boat, as I have explained to the Deputy Minister on his visit to the Saguenay River last summer.

The capture of parent salmon was carried on this season with the only “Point Rouge” fishery, but it will be better to continue to keep our two government

fisheries, to be sure of a good supply of parent salmon and in case to be in position to help other hatcheries, as the thing has been wanted last summer. The "Point Rouge" fishery took only 360 salmon, the fishing being bad all over. Of the 360 salmon 230 were females and 130 males. The 230 females gave 2,413,000 eggs, a little over 10,000 each. The spawning time was over by the 13th of November. All the parent salmon were liberated in good condition. In September, by instructions of the Deputy Minister, I went up to Lake St. John, to assist Mr. Richard Pollett, undertaking the management of a private fish hatchery for H. J. Beemer, Esq. The site of this new hatchery has been well selected, close to a fine stream of pure water. Beside the stream, a large ditch, has been cut along the side of a hill to supply the hatchery with cold water from many sources on the hill-side to be specially used in the hot season. I had occasion to visit many splendid rivers, well adapted for the breeding of sea salmon, but this is the most favourable I ever saw, the young salmon having a beautiful way of reaching the salt water by the grand discharge of the Lake St. John and the Saguenay River. Mr. H. J. Beemer has built a pretty large hatchery, in the hope of receiving a certain quantity of salmon eggs. I recommend that a good allotment be given him every year. I consider that there is no better place for the breeding of our sea salmon. By a letter from the manager of Mr. Beemer's hatchery, I think this gentleman was under the impression that the department was to give him a certain quantity of salmon eggs. Our hatchery is in good order and does not require any repairs for the present. I hope that something will be done next year for pulling down the old hatchery.

I have the honour to be, sir,

Your obedient servant,

L. N. CATELLIER,

MAGOG, 1st December, 1897.

Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit my report upon the operations at the Magog Hatchery for the year 1897.

On the 19th March there were received at the hatchery 3,000,000 whitefish eggs, and 1,500,000 salmon-trout eggs, which were successfully hatched and distributed as follows :—

Salmon trout.

Massawippi Lake, County of Stanstead	225,000
Lake Megantic, County of Megantic.....	120,000
Orford Lake, Counties of Brome and Sherbrooke..	250,000
Brome Lake, County of Brome.....	100,000
Key Pond, County of Sherbrooke.	125,000
Lake Magog, Counties of Brome and Stanstead.....	675,000
Spider Lake, County of Brome	5,000
Total.....	<u>1,500,000</u>

Whitefish.

Massawippi Lake, County of Stanstead.....	400,000
Lake Megantic, County of Megantic.....	200,000
Orford Lake, County of Brome and Stanstead.....	500,000
Brome Lake, County of Brome.	250,000
Key Pond, County of Sherbrooke.....	250,000
Lake Magog, County of Brome and Stanstead.....	1,400,000
Total	<u>3,000,000</u>

The distribution of fry continued from 3rd May to 21st June, and as the eggs and fry were in splendid condition, there was practically no loss.

The water supply in this hatchery is the best, in my opinion, I have ever seen on account of its perfect purity. The instructions from the Department of Marine and Fisheries were that I should send from 10,000 to 50,000 salmon-trout fry from the Magog Hatchery to Spider Lake at the request of Mr. Lucien Huot. I was able to send only 5,000 for the following reason: all the fry in the hatchery were planted previous to receiving instructions. Very good accounts of the results of the fry planted have been received, in Lake Magog this autumn. I have seen larged quantities of whitefish on the spawning beds. Certain repairs which are necessary have been reported to the department.

I have the honour to be, sir,

Your obedient servant,

ALEX. FINLAYSON.

OTTAWA, ONT., 27th Nov., 1897.

Prof. E. E. PRINCE,
Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit my annual report of the operations carried on at the Ottawa Hatchery during the year, 1897.

On the 22nd November, 1896, 1,200,000 salmon-trout eggs were received from the Newcastle, Ont., Hatchery, and in March, 1897, 3,000,000 whitefish eggs were also received from the hatchery at Sandwich, Ont. The eggs from both these hatcheries were in excellent condition.

The fry hatched out strong and healthy in the months of April and May, 1897.

The work of distributing the fry was entrusted to Mr. Andrew Halkett, and Mr. J. D. Sutherland, both officials in the Fisheries Department. I am pleased to inform you that the work was done in a very satisfactory and successful manner. The fry having been deposited in the following named waters:—

WHITEFISH.

Missisquoi Bay	480,000
Clear and Carp Lakes.....	400,000
Patterson Lake.....	320,000
Lakes, No. 6 and 7, Joliette County, Que	320,000
Pine Lake.....	320,000
Charleston Lake	320,000
Otter Lake	240,000
Little “	240,000
Clear “	200,000
Lake Majors Hill Park, Ottawa.....	80,000
Total.....	<u>2,920,000</u>

SALMON TROUT.

Meache's Lake.....	110,000
Sloats Lake.....	100,000
Lac De Sable and Lac à La Truite, Ste. Agathe, Que... ..	90,000
Mississippi Lake.....	80,000
Bass Lake	60,000
Missisquoi Bay.....	60,000
Clear Lake	60,000
Doré “	60,000
Rock “	60,000
Pine “	60,000
Patterson's Lake, Ont.	60,000
Lake No. 7, Joliette County, Que.....	60,000
Source, and Smoke Lakes	60,000
St. Jovite, Que.....	60,000
Clear and Carp Lakes	60,000
St. Maurice, Que.....	50,000
Allan Lake.....	40,000
McKay's Lake	50,000
Total.....	<u>1,180,000</u>

The hatchery is in good order and repair for the coming season's work. Owing to the spawning season being later this fall than usual, I have not yet received the usual supply of salmon-trout eggs.

The Canadian Fisheries Exhibit and Hatchery have been visited by over 22,000 persons during the year. The aquaria, which are now being repaired and stocked with living fishes, will prove an additional source of interest to the numerous visitors to the Fisheries Exhibit and Hatchery.

I am, sir,

Your obedient servant,

JOHN WALKER,

Officer in charge of Ottawa Hatchery.

BEDFORD, N.S., 1st December, 1897.

Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I beg to submit my annual report on the operations at the Bay View Lobster Hatchery for 1897.

On account of the backwardness of the season, fishing did not commence until about the 15th of May, and on the 20th the first eggs were received at the hatchery. But very few were collected until the 2nd June, when the steamer "Diamond" was employed to collect from the factories around Pictou Island.

Lobsters were quite plentiful, and the pack of some of the factories was larger than that of the previous year, but for some reason unknown to me berried lobsters were scarce during the whole season, and in order to fill one half the incubators I found it necessary to seek new grounds to obtain eggs.

On the 8th June I went to Canso, carrying with me a number of boxes which I had constructed during the winter for the purpose of carrying eggs a long distance, which I distributed around among the factories there, giving the necessary instructions to the employees as to managing them, and returned to the hatchery.

On the 18th the "Diamond" went to Canso, returning on the following day with 10,000,000 eggs in splendid condition, and a much larger quantity would have been received had the traps not been broken by a violent storm which occurred at that time.

Fry first appeared in the incubators on the 17th June, distribution commenced on the 26th June, and ended on the 5th July, when 90,000,000 young lobsters were successfully planted.

Last spring, by permission from the department, I had constructed a new supply tank outside the building, which proved satisfactory.

The hatchery is in a good state of repair, except some of the waste pipes, which will require to be renewed at a trifling cost, and if the wharf receives no damages by ice during the coming winter, work may be commenced early in the spring.

This hatchery has been in operation seven years, and if any benefit is to be derived from artificial lobster culture it should be seen now, and I am pleased to learn from many of the packers and fishermen who have been anxiously watching the operations that they now see good results, and believe that lobsters planted from the hatchery have added largely to their supply.

I am, sir, your obedient servant,

ALFRED OGDEN.

NEWCASTLE, 13th December, 1897.

Prof. E. E. PRINCE,
Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour herewith to submit a report of the fish cultural operations carried on at this hatchery during the past year.

The following schedule will show the points of distribution, also the number and kinds of fry placed in each locality last spring :—

Whitefish.

Lake Ontario, at Hamilton.....	300,000
do Toronto.....	300,000
do Cobourg.....	300,000
do Newcastle.....	300,000
Bay Quinté, Picton.....	300,000
do Belleville.....	300,000
Lake Simcoe, Barrie.....	300,000
Lake Couchiching, Orillia.....	300,000
Pond at Elmvale.....	300,000
	<hr/>
	2,700,000
	<hr/>

Salmon Trout.

Georgian Bay, Collingwood.....	100,000
do do Wiarton.....	200,000
Lake Simcoe, Barrie.....	100,000
do Couchiching, Orillia.....	100,000
do Ontario, Hamilton.....	100,000
do do Toronto.....	100,000
do do Cobourg.....	100,000
do do Picton.....	100,000
do do Kingston.....	100,000
do do Newcastle.....	175,000
Bay Quinté, Belleville.....	100,000
Lake Huron, Southampton.....	100,000
Pond in Lambton County.....	25,000
Lakes, North Hastings District.....	100,000
	<hr/>
	1,500,000
	<hr/>

SCHEDULE showing total number of fry and semi-hatched eggs distributed from this hatchery during spring of 1897.

Whitefish.....	2,700,000
Salmon trout.....	1,500,000
Eyed eggs to Magog.....	2,000,000
do St. John.....	500,000
	<hr/>
Total distribution from Newcastle.....	6,700,000
	<hr/>

I beg to inform you that the fry was all deposited in the different waters in the very best of condition.

In September, having received instructions from your department to proceed to Sault Ste Marie for the purpose of gathering a supply of salmon-trout spawn for this and the other hatcheries, I went there on September 15th with two assistants. I found that the fishing was all carried on about 130 miles up the lake from Sault Ste. Marie. I was therefore compelled to wait three days for the arrival of the tug before we could proceed to our destination, where we arrived on the morning of 20th. Fish were scarce, the catch not being more than half as good as last season. They were just beginning to spawn. I therefore assigned the men to their different places with a view of securing a supply, but up to the 20th of November only succeeded in collecting some 1,500,000. I saw that as the fish were getting scarce it would be impossible to get a full supply. I at once asked your department for permission to purchase and set a pound-net at Wiarton in order to secure a full supply if possible. It was set on November 3rd, and fished until December 2nd, and we succeeded in obtaining 2,350,000 eggs.

I must inform you that of the 1,500,000 ova gathered in Lake Superior, at least one half turned bad before my return home. Several causes are given for it, first, the fish were caught in gill-nets and cannot be as good for spawning purposes as fish that are caught in pound-nets; second, the water is very cold in Lake Superior, and in taking the eggs out of cold water and putting them into the warmer waters further south must certainly have a bad effect on them. The United States Hatchery officers lost their first two shipments of eggs, through the same cause.

Whereas in getting eggs at Wiarton the fish do not start to spawn for at least one month later, I would therefore suggest that your department purchase one more pound-net and set them both near Wiarton or vicinity, which, I think, would be found the most economical way of gathering spawn.

There is now laid down in this hatchery 3,109,000 salmon-trout eggs which are doing well at the present time.

In regard to repairs, a new floor on the hatching room and a new set of hatching troughs are required in order to put the hatchery in proper condition to do the work.

I have the honour to be, sir,

Your obedient servant,

JOHN KENEFICK.

SANDWICH, 14th December, 1897.

To Prof. E. E. PRINCE,
Commissioner of Fisheries,
Ottawa.

SIR,—I beg to submit my annual report of operations connected with the above hatchery during the past year:—

As stated in last year's report this hatchery contained 95,000,000 whitefish eggs, from which were turned out 87,000,000 young fry and semi-hatched eggs which were disposed of as follows:—

EYED EGGS.

Ottawa, Ont.....	3,000,000
Newcastle, Ont.....	3,000,000
Magog, Que.....	3,000,000
Bedford, N. S.....	3,000,000
St. John, N. B.....	3,000,000
Total.....	15,000,000

YOUNG FRY.

Point Edward, Lake Huron.....	3,000,000
Mitchell's Bay, Lake St. Clair.....	3,000,000
Peach Island, " ".....	3,000,000
Belle Isle, Detroit River.....	3,000,000
Fighting Island, Detroit River.....	5,000,000
In bay below Fighting Island.....	4,000,000
Stony Island, Detroit River.....	4,000,000
Bois Blanc Island, Detroit River.....	6,000,000
In Lake below Bois Blanc Island.....	5,000,000
Pigeon Bay, Lake Erie.....	3,000,000
Bar Point, ".....	3,000,000
Colchester, ".....	3,000,000
Kingsville, ".....	1,000,000
Leamington, ".....	1,000,000
Rondeau, ".....	1,000,000
Port Stanley, ".....	1,000,000
Hamilton, Lake Ontario.....	1,000,000
Niagara, ".....	1,000,000
Toronto, ".....	1,000,000
In river at hatchery.....	20,000,000
Total.....	72,000,000

These fry were placed in the water at the above named points in a good healthy condition.

This fall we have in the hatchery 95,000,000 whitefish eggs which are in first class condition, and from pre-ent appearances the most encouraging results are expected.

The total catch of fish this autumn was 9,476, accounted for as follows :—

Liberated	6,376
Sold	2,860
Salted	120
Lost	100
Hôtel Dieu (Hospital).....	20

Total..... 9,476

The above figures show that a smaller number of fish were taken this fall than last. We did not require so many this year from the fact that the fish were in better condition when we caught them, as they were almost ready to spawn when taken. The fishing was very good when we finished.

The fish never were known to be so late in coming into the river. Eggs were first brought into the house on the 22nd day of November, about three weeks later than previous years. I have repaired the piers, put them in good condition and am of opinion that they will last for three years at very little expense. I have lifted the shanties on the piers this fall in charge of the lighthouse keepers of Grassy Island, Mamajuda light and Mr. Fountain, who has charge of Fighting Island. My object in this changing the custom of the last few years in this respect was solely for the purpose of saving expense.

Respectfully submitted.

I remain, sir, your obedient servant,

WM. PARKER,

Officer in Charge.

ANNEX 1.

REPORT ON OYSTER CULTURE BY THE DEPARTMENT'S EXPERT, 1897.

OTTAWA, 31st December, 1897.

To the Honourable

Sir LOUIS H. DAVIES, K.C.M.G.
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit my report for the season of 1897 on oyster culture. On the opening of navigation I left Ottawa for Charlottetown, P.E.I., where I took charge of a small steamer for the purpose of examining the several areas visited by me during the season's work.

Shediac Oyster Beds.

On completing my examination of the above beds, I found they were clean and free from eel grass. Where the grass has been thoroughly rooted out there does not seem to be any reappearance of the same.

The oysters are growing in a very satisfactory manner. On bed No. 1 which was first planted, the oysters have developed until they are now in fine condition and ready for market. From 150 to 300 oysters can be taken at a haul of the dredge, both oysters and soil are clean and free from silt, and several young oysters can be found varying in size from last year's spat up to full growth. Several oysters were removed from stones which were used as sinkers for the brushwood, measuring from $3\frac{1}{4}$ to $3\frac{3}{4}$ inches in length. Brood oysters of various growth are also to be found attached to oysters, sticks, stones and shells, the oysters are of excellent quality and in healthy condition.

On bed No. 3 they are not quite so large, but are well developed and in good condition; most of these were transplanted from Richmond Bay, P.E.I., they have thickened well, and I can see every sign of growth. Young oysters are found in very fair quantities. This bed is also clean, in good condition, and the oysters are looking very healthy.

On bed No. 2 the oysters are smaller and not so numerous, this is owing probably to the area lying close to the southern boundary line, and oysters have been taken from this bed by poachers during the night-time. Since visiting these beds and just previous to my return here, several residents of the locality have informed me that poaching is quite prevalent on all the beds. I have asked everybody who has given me this information to supply proof in order that action may be taken against the guilty parties, but while they are satisfied that poaching is quite common they do not wish to take any active part which would lead to conviction.

I also examined some of the uncultivated areas. These beds are gradually becoming covered with sediment and eelgrass, which will eventually destroy them, as the eelgrass grows so long during the summer months, collecting sediment on these beds. As the winter approaches the grass dies off and either settles or decomposes on the beds, or is carried on shore by the wind and tide. Oysters of all sizes are however to be found; I have not dredged a single uncultivated area without finding oysters, to a certain extent.

Unsolicited reports have been brought to me by different fishermen that oysters are now to be found at various distances from the reserve. This is no doubt the result of the spat drifting from the location of the parent oyster, they were found last year by myself outside the reserve as shown in my previous report.

BAY DU VIN.

I was instructed to examine this area last year, but owing to the lateness of the season was unable to do so then, but have given my attention to it this year.

Oysters are to be found around the shores of the bay on both sides in a depth of water varying from about five to fifteen feet. They are found on the west, south and east sides of Bay du Vin Island and all around Egg Island, with several beds off shore nearly down to Fox Island; this forms the north side of the bay. The south side of the bay where oysters are found commences at French Village at the eastern end following the shore running west as far as Point au Quart, including Vin and Black rivers.

Oysters appear to be scattered over a very large area. As the water deepens very gradually, the bottom in several places is of a clear sandy soil with a few scattered shells. Oysters and brood are to be found in very fair quantities, they are single and are growing over the whole area. The greatest proportion of oysters taken during the examination were small ones, there being a great many more brood than other oysters, which is a very healthy sign as it shows the small ones are there to replace the larger ones as they are taken. At a greater depth than fifteen feet soft mud is to be found which gradually deepens from both shores forming a wide channel between the main land and the islands.

Oysters that are taken from deep water are of a superior quality to those taken from beds in shallower waters, the latter being of quicker growth.

There are some shallow solid oyster beds composed of shells; these are in most cases thickly covered over with mussels, the oysters that are found there are poor in quality, as the mussels have over-run the beds. Weed and eelgrass also grow in large quantities on the flats, but where they exist only in small quantities, oysters are to be found. They are also found on the outer or north side of Egg Island which consist of extensive flats, the bottom is composed of sand, stones, shells and eelgrass; large quantities of oysters have recently been picked from there by hand, the fishermen wading in the water to obtain them when the tides are low.

West of Bay du Vin Island on the south shore round to Point au Quart, the nature of the bottom is rougher and is composed of large stones and rocky ledges; very little fishing is carried on here owing to the nature of the soil. Some very good oysters were found around the shores in a depth of water varying from 9 to 13 feet.

In Vin River (lately occupied by Mr. Hatton of Montreal) large quantities of young oysters were found growing in the channel up as far as the bridge, but above it the soil is composed of hard mud or sand with bark, chips and logs covering the bottom; no live oysters were found, but in places shells could be seen showing where experiments had been carried on. One of the men employed by Mr. Hatton, accompanied me, and pointed out the different areas where experiments had been made. I am of the opinion that the bottom or bed had not received a sufficient quantity of cultch previous to the oysters being placed there, the settlings of the river had drifted down and smothered the stock which had been planted. Below the bridge the soil was cleaner, the bottom is composed of shells and shifting sand.

In Black River oysters are of very rapid growth, thin shells, long and inferior in quality, the soil is of a softer nature, large quantities of soft mud are found here, and the bed of the river has been very much cut to pieces by mud diggers. Very little mud digging appears to have been carried on in any other part of the bay, unless it was on some shallow extinct bed which had grown nearly to the surface of the water.

This area requires protection, and the inhabitants are anxious that it should be protected in such a way that they will be able to fish during the fishing season. This could be done by dividing the area in two sections, making the channel of the bay the dividing line; the marks of the division should be from Gardner's Point to the leading lights on the middle of Fox Island. Fishing to be done on the south

shore the first year, and on the island area or north shore the following season. I would respectfully suggest that immediate action should be taken in this matter by the department which would be beneficial to all concerned.

Complaints were also made that strange schooners belonging to other ports will come and fish on these beds bringing with them a crew of about eight or ten men. These vessels come already provisioned; they will take away large quantities of oysters irrespective of size, which must be very detrimental to the beds.

I would strongly suggest while these boats or schooners are loading their oysters that the fishery officer of the district be instructed to visit them daily to inspect and examine the class of oysters that are shipped, and insist on the size limit being maintained, under a penalty of their oysters being seized and their crew fined. This should be immediately stopped, as it not only robs the beds of the coming stock, but the public at large in other cities are being deceived as the small oysters are sold as Caraquette oysters (they being smaller in size), they are also taking an undue advantage of an honest fisherman who returns small oysters to the water.

TRACADIE, N.S.

Upon the completion of my examination of the beds of Bay du Vin I proceeded to Tracadie, N.S., to inspect the grounds which were previously cleaned and planted by the department, and found the bed to be in a fairly clean condition, very little sediment having rested upon it. It was also clear of eelgrass with the exception of a very small quantity on the inside. A slight percentage of death was noticeable; this may be attributed to the warm weather which existed when some of them were laid last year, also to breakage in transit, &c.; the average is not more than was to be expected under the circumstances. The oysters are looking healthy and a growth is to be noticed. I cannot say that I have seen any oysters of last year's spat, this probably might be checked through transplantation; but on examining some of them I found they were full of ripe spawn, and I am in hopes of some resting upon the beds this season.

I also visited the West Arm and found the oysters were very scarce owing to excessive fishing in the past. These oysters were also full of spawn. The weather in the spring of this year has been very cold, wet and backward, which would check the oyster spawning to a great extent. When these oysters were examined the weather was very hot. The beds are now clean, free from weed and sediment, and there is every prospect of the beds turning out successfully.

BRAS D'OR LAKES.

After inspecting the beds at Tracadie, I proceeded to the Bras d'Or Lakes, C. B., and examined the oyster areas in the locality of Malagawatcht Inverness County, comprising River Dennis, Seal Cove, Malagawatch and Orangedale Bays, Boom, inside and outside of Little Crossing, McKinnon's harbour, and the shores around the islands and coves in the said bays and rivers.

Oysters are to be found thinly scattered over the whole of the above area, along the shores, in a depth of from eighteen inches to 10 or 11 feet water. There are really no beds, but as the oyster spawn settles on the bottom, the largest portion of it is lost on account of the weeds and eelgrass being so thick, this eelgrass also causes a sediment to fall upon the bottom, there being very little tide, in most places not sufficient to carry off the settlings which are deposited on the bottom by the rivers and streams emptying themselves into the larger bodies of water. The soil is varied, in some places hard stony ground is found, in others it is sandy, gravelly, clay or hard mud and soft mud, and in nearly all cases covered with eelgrass. The oysters taken are of good size and of a delicate flavour. The size varies. Very few oysters are taken beyond a depth from which the bottom cannot be seen. The water is clear, as a rule, the bottom being easily visible at a depth of 6 or 8 feet from the surface. Single handled rakes are generally used with teeth from six to eight inches long, to enable them to work through the eelgrass, also for

OYSTER CULTURE.

working in the mud. An instrument called a dip-net is also used. This consists of a circular or oblong band of iron about 8 inches in diameter, and when they are oblong will have a depth of 12 inches by 8; at the back of this is attached a small net made of either wire or twine, and fixed to a pole about 10 or 12 feet long for a handle; when an oyster is seen from the boat it is scooped into the dip-net. At times when there is wind and it is difficult to see the bottom, some of the fishermen will sprinkle oil on the rough water around their boat enabling them to see the bottom more clearly.

In River Dennis oysters grow very fast, attaching themselves to logs and stumps lying on the bottom. The oysters are well shaped, full and clean, but are of little commercial value, as the shells are very soft and the water fresh or slightly brackish. The bed of the river is muddy and in some places sandy, no oysters were growing anywhere but on the sunken logs and sticks of which the river is full, they are in from three to about eight or nine feet of water.

Stony Point which divides Malagawatch Bay from Orangedale Bay is a large flat on the south side, the bottom is clean owing to the strong tide running through the narrow entrance, large numbers of small oysters were noticed here, the scarcity of large ones is no doubt due to their being caught as soon as they are large enough, also to the shallowness and clearness of the water which renders it easy to secure them.

Most of the shores are covered with eelgrass, although places are to be found where there are clean spots or patches with oysters upon them.

No oysters were found at a greater depth than about eleven feet of water, although I examined the middle of the bays and found between four and five fathoms, the bottom consists of firm mud and clay, large quantities of mussels are found to abound here, they grow on a firm clean soil free from eelgrass.

One thing I particularly noticed during the examination was the large quantity of oyster spat that had attached itself to the live eelgrass. When I first noticed this they were not larger than the head of a pin, and could only discern them by the aid of a pocket-lens, the growth was rapid as the water was warm and shallow, and before I left the spat had become so heavy that it was sinking the eelgrass to the bottom where it lay among the dead matter and sediment, the larger portion of it dying through the bottom being so dirty.

Large quantities of this young spat could be saved artificially until it had attained a growth to be able to take care of itself.

Oyster spat was also discovered attached to the branches and twigs of trees which overhung the banks of the rivers and creeks, also upon stakes fixed in the water for the purpose of either tying boats or nets to, the water in these creeks was warm and sheltered, and the growth was very rapid.

At Wycocomagh the areas are similar to those of Malagawatch and Orangedale, although I believe the oysters are scarcer at the former place.

CARLETON, BONAVENTURE COUNTY.

The area here consists of a Barachois containing about 471 acres; chiefly flats with a depth of water varying from 18 inches up to 5 or 6 feet, with a rise and fall of about 6 feet spring tides.

This area is at present under the control of a Quebec company who are improving the grounds for the purpose of cultivating oysters. The entrance to this area is through a narrow inlet of about 200 feet in width. A dam is being constructed with five sluice gates, the length of it is about 230 feet long which reaches opposite shores above high water mark, it is being very strongly built of heavy timber and closely piled all round the outside. The narrowest part of each buttress is 17 feet wide, with pointed abutments between each gate making the widest part about 34 feet, and a distance of 35 feet between each gate or sluice. Large quantities of rock and stone are being placed both inside this wooden structure, which is afterwards to be filled in with shingle or gravel, making it solid and perfectly water-tight, and,

on the outside and inside of the dam, rocks and stones are being placed to prevent the woodwork from being washed away, also to strengthen the foundations. I am of the opinion the work is being very substantially built.

The object of building this dam with sluice gates is to gain every advantage over the area they have under their control. They can when cleaning the grounds, or catching or picking their stock for market keep the water low which would lighten their work very considerably. On the other hand, during the winter months the water can be retained inside the inclosure, so that when frozen over it will protect the oysters from frost, providing there is water between the bottom and the ice.

Then again during the spatting season the area could be continually supplied with small quantities of sea water, letting none escape, and by which means considerable spat may be secured and saved.

The bottom of the reserved area consists of clean gravel, sand, firm mud, mussel banks, and when the bottom is softer eelgrass is growing in large quantities. The bottom at the eastern end is the softest, owing to there being less current than elsewhere as the outlet is at the western side.

The water is very clean and clear, and not too salt, there are two small streams flowing into the area, these I consider will not in any way be harmful but rather beneficial to the oyster.

NORTH RIVER, CHARLOTTETOWN, P.E.I.

After examining and reporting upon this area last fall, it was decided to open the river for public fishing to licensed oyster fishermen for a short period. Reserving this area has had the desired effect, and has proved an excellent test case, as oysters have grown and accumulated. Before it was closed some three or four years ago, a man could scarcely catch a bushel of oysters in a day; when opened for public fishing last fall, the first day's catch amounted to 500 barrels, the grounds were opened for three weeks when it was estimated that from 1,800 to 2,000 barrels of oysters were taken during that time. I have again examined the grounds and find they are now in a good clean healthy condition with a large quantity of young oysters scattered over the whole bed of the river. I have every reason to believe there will be another good crop later on. It was decided not to open the area for public fishing this season, as most of the oysters were small. If allowed time, the oysters will attain their full growth, then the fishermen will reap the benefit of a good catch. I do not entertain the slightest doubt that if other areas were reserved in a similar way, it would be beneficial to the fishermen generally, as it is now clearly to be seen that oyster areas throughout the provinces are being fished to a far greater extent than they really should be.

BEDEQUE BAY.

This area which I have previously visited and reported upon, is I regret to say in a less favourable condition than I had anticipated, as far as the size of the oyster ground is concerned.

The area approaching Wilmot's Creek on the north side is totally unfit for reservation, or the cultivation of oysters, as it is in such disjointed patches, caused by mud digging there from time to time. Some of the ground is found to be clean and free from eelgrass, but it is scarcely possible to go a boat's length without meeting a mud digger cut. The few oysters taken from here are chiefly found around the edges of these small patches. A slight increase is reported in the quantity of oysters taken from there this fall; three and four boats were seen working there, catching from 2 to 4 baskets ($6\frac{1}{2}$ baskets = 1 barrel) per day on an average; sometimes they may strike a place where a small bed has not been disturbed for some time. Inside of this area the water is too shallow for planting purposes.

Off Oyster Point on the south side of the bay there is an extensive flat covered with eelgrass, and underneath the sediment oyster shells are found, but at low spring tides it nearly dries and would not be suitable on account of the shallowness of the water.

The other portion of the bay and river is too much cut up to anticipate oyster culture.

I may say the whole of this once valuable area is now so cut up into a network of trenches that I am unable to find an area sufficiently large to reserve for departmental cultivation. I did not deem it necessary to visit Richmond Bay this season as I reported fully on the areas there in my last year's report. See page 316.

OYSTER AREAS AND LEASES OR LICENSES.

The department has for the past few years granted areas of ground at a nominal rate to persons who interest themselves in oyster culture. The areas thus granted are either dead oyster beds, or areas of ground which can be converted into an oyster farm; and I am glad to know that is has not been the policy and it is not the intention of the department to grant public oyster fishing grounds to individuals or companies, so that by these means the oyster areas of the provinces may be enlarged, and I am pleased to state that persons are taking up areas for private cultivation. The idea is a good one in which all are concerned. These licenses extend over a period of 9 years and are issued at the rate of \$1.00 per acre per annum. Persons will stock their areas with young or marketable oysters, these in their turn will throw off their spat, which the owner has practically no control of; it may rest either upon his own beds, or may be carried away by the tides and currents to other areas either public or private as the case may be. This encouragement of private enterprise may be the means of keeping up the stock upon public beds, if the regulations are strictly adhered to.

This will to a certain extent counteract the loss of ground which is annually destroyed by mud-digging. This practice is not now carried on to so great an extent as formerly.

The following, are the total number of acres licensed to persons in the different provinces to date:—

	Acres.
Quebec.....	472
New Brunswick.....	47 $\frac{1}{2}$
Nova Scotia.....	74 $\frac{3}{4}$
Prince Edward Island.....	46
British Columbia.....	142 $\frac{1}{2}$
“ “ Indian reservation.....	365
Total.....	1147 $\frac{3}{4}$

The area reserved for the Indians in British Columbia is merely flats in front of their reservation from which they will pick oysters but do not cultivate them. Besides the above areas granted, other applications are still coming in, which will in turn be granted upon the approval of the Department. The area in Quebec I have already explained in this report, other areas vary in size from one acre upwards. At present there are forty persons in the Dominion holding licenses of oyster areas, divided as follows:—Quebec 2, New Brunswick 2, Nova Scotia 12, Prince Edward Island 17, and British Columbia 7.

Another advantage with persons holding oyster areas is, that they can keep their stock until a market is available, they can also select their oysters; as a rule, at the first part of the season everyone fishing for oysters sends them to the market, which soon becomes glutted, and the price falls.

PUBLIC AREAS.

Public areas might also be reserved at different parts of the provinces from public fishing, if only for one season, and opened every alternate year; if this scheme came into force I am confident it would protect the fishing industry and have a beneficial result, for I notice as a rule that oysters are shipped to market too young, they may be within the regulation size and yet not developed, if this plan were adopted it would give an oyster time to grow to its natural size and thus bring a better price.

EFFECTS OF FROST.

It has been noticed that during the last few years oysters have been taken in very fair quantities from the river flats and areas that dry at low water, but these areas are not always to be depended upon in their yield, as they are placed in such an exposed locality, being subject to the frost. It makes a great difference when the frost sets in on areas such as these, if the frost comes with any force during spring tides when these areas dry at low water it is nearly always fatal to the oyster, if on the other hand the ice makes during neap tides and remains, it acts as a covering and protection to the oyster, and when the ice actually rests upon the flats the soil is sufficiently soft to allow the oyster to be pushed into the mud until the ice rests on the whole area, in such cases the oyster will live, but where the oyster is exposed to the frost by low tides and heavy winds the oyster itself becomes frozen, which means certain death especially to the half grown ones. This was particularly noticed on the flats at Davies Point, Orwell River, P. E. I., covering an area of about 7 acres; in 1896 over 1000 barrels were picked up. That winter the ice made during low spring tides which appeared to kill nearly every thing off, as there was not one-fifth taken from there that year. Pownal Bay was found to be in the same condition, this has been noticed and watched by practical men.

The quantity of oysters taken during the season of 1896, will be found in the tables of this report.

I have the honour to be, sir,

Your obedient servant,

ERNEST KEMP,

Oyster Expert.

APPENDIX No. 12.

REPORT ON THE FISHERIES PROTECTION SERVICE OF CANADA, 1897, BY COMMANDER O. G. V. SPAIN.

OTTAWA, 15th December, 1897.

To the Honourable Sir LOUIS H. DAVIES, K.C.M.G., &c.,
Minister of Marine and Fisheries.

SIR,—I have the honour to report on the work of the Fisheries Protection and Fisheries Intelligence Bureau Services under my charge during the past season, as follows:—

The vessels comprising the fleet were as follows:

Vessels.	Date of Commission.	Date of Paying off.
"Curlew".....	15th April....	16th Nov.
"Constance".....	18th March....	13th do
"Aberdeen" (in fisheries service off and on).....		
"Dolphin".....	29th April....	20th do
"Petrel".....	27th do.....	20th do
"Kingfisher".....	1st do.....	16th do
"Osprey".....	21st do.....	19th do
"Acadia".....	25th May.....	6th do
"Victoria".....	6th do.....	6th do

The "Quadra," Captain Walbran, on the Pacific coast, was used from time to time by the fisheries branch of the department. An account of her work will be found on page 288.

The "Acadia" was engaged as usual in the general supervision of the fleet, and owing to both the "Stanley" and "La Canadienne" being out of commission this year, she was kept constantly moving. The boilers and machinery of this vessel are getting very old,—nearly eighteen years, and will no doubt require very extensive overhauling shortly.

The "Constance" was employed in revenue work in the Gulf and River St. Lawrence, and made a trip to St. Pierre Miquelon with Chief Preventive Officer Jones on board. She made an important seizure on the 27th of October, of the schooner "Canada," with \$1,000 worth of spirits on board. A regular report of her work will be found on page 284.

"Curlew."—This vessel was chiefly employed in the Bay of Fundy, but both early and late in the season she was cruising off the Cape Breton and Prince Edward Island coasts. A report of her work will be found on page 290.

"Petrel."—This vessel was employed almost entirely in Lake Erie. She pays off, and lays up at Owen Sound. Her work is to prevent depredations by foreign fishermen in our waters, also general supervision of our own fishery regulations.

"Aberdeen."—This vessel was under the charge of Commander Lavoie, the officer in charge of the Gulf Division of Fisheries, Dr. Wakeham having been sent in command of the Hudson Bay Expedition. She was also employed for a considerable period in lighthouse and buoy services.

The "Dolphin."—This patrol boat (very old and very slow) was employed in the Georgian Bay looking after our own fishermen. Her headquarters were at Owen Sound.

The "Osprey."—This is the new schooner built by Mr. McGill of Shelburne, last year. She has proved herself a splendid vessel, fast, roomy and a good sea boat. Her station has been from Canso to Sydney in Cape Breton and later in the season on the S. E. coast of Nova Scotia. I am convinced that this schooner can compete with any vessel of her class on the coast.

The "Kingfisher."—This sailing cruiser has had her station off east point P. E. I., and has done excellent work, in looking after poachers and illegal fishermen of all descriptions.

The officers and men of the service gave me every satisfaction, except in a few instances. The work has been very arduous this season on account of the small number of vessels which were under my command.

I am pleased to be able to report that not one instance of poaching came under my notice. When the extreme length of coast line is taken into consideration it will be apparent how the vessels have to be continually at sea to protect it. The U. S. man of war "Marblehead" has been in the gulf this year, and made her headquarters at the same place as myself, that is to say at Charlottetown, P. E. I. Although she was undoubtedly sent to watch the movements of my fleet, the most cordial relations existed between us. In fact, I have not much doubt that one of the reasons I had so little trouble with United States fishermen this year was to a great extent due to the presence of this vessel on the coast.

The Customs Department had an extra vessel on the Cape Breton coast this year, the "Victoria" under the command of Captain Demers. Although she did not make seizures, she no doubt helped in a great way to debar the numerous bands of smugglers which infest this coast from carrying on their nefarious operations.

The only seizure this year was made just at the end of the season by Captain Knowlton of the "Osprey" at Shelburne, N. S., of the United States fishing vessel "Carrie E. Philips," of Provincetown, U.S.A. She is under detention for an infraction of the customs laws in that she entered and left Lockeport Harbour, N. S., without reporting at the custom-house. The case is now under consideration. She was an unlicensed vessel and had a perfect right under the treaty to come into port for repairs which she did, but what her object was in failing to report it is difficult to imagine.

The above named vessel has since been released on payment of a deposit of \$200.

LICENSES FOR FOREIGN FISHING VESSELS.

The same Order in Council being passed as before, that is sanctioning the continuance of the issue of *modus vivendi* licenses to United States fishermen, similar permits were issued in 1897.

The following table gives a list of the vessels that took out licenses in 1897:

SCHEDULE of United States Fishing Vessels to which Licenses were issued under the Act entitled "An Act respecting Fishing Vessels of the United States of America," during the year 1897.

Name of Vessel.	Port of Registry.	Tonnage.	Port of Issue.	Fee.
Essex	Gloucester	84	Pubnico, N.S.	\$ 126 00
Alice R. Lawson	do	115	do	172 50
Senator Saulsbury	do	102	do	153 00
Hazel Oneita	do	73	Shelburne, N.S.	109 50
Parthia	do	77	Tusket, N.S.	115 50
Madonna	do	79	do	118 50
Emma E. Wetherell	do	109	Pubnico, N.S.	163 50
Blue Jacket	do	86	Yarmouth, N.S.	129 00
Thetis	do	91	do	136 50
Mystery	do	89	Pubnico, N.S.	133 50
Fernwood	do	96	do	144 00
Mabel D. Hines	Beverly	92	do	138 00
Winona	Gloucester	103	do	154 50
Meteor	do	96	do	144 00
Elector	do	84	Tusket, N.S.	126 00
Wm. E. Morrissey	do	93	do	139 50
Annie Wesley	do	88	do	132 00
Margaret	Beverly	107	do	160 50
General Cogswell	Gloucester	97	Liverpool, N.S.	145 50
Marguerite	do	81	Tusket, N.S.	121 50
Emma S. Osier	Eastport	22	Campobello, N.B.	33 00
Pinta	Gloucester	94	Canso, N.S.	141 00
Gertie Evelyn	do	81	Arichat, N.S.	121 50
Wm. Matheson	Provincetown	72	St. Peters, N.S.	108 00
Julia E. Whalen	Gloucester	96	Port Hawkesbury, N.S.	144 00
Volunteer	do	102	do	153 00
Masconoma	do	91	Arichat, N.S.	136 50
Annie G. Quiner	Bucksport	79	St. Peters, N.S.	118 50
Edgar S. Foster	do	79	do	118 50
Gladstone	Gloucester	75	Canso, N.S.	112 50
Nellie Burns	Portland	43	do	64 50
Ralph E. Eaton	Gloucester	47	Souris, P.E.I.	70 50
Lizzie Walworth	Millbridge	8	Campobello, N.B.	12 00
Epes Tarr	Gloucester	48	Souris, P.E.I.	72 00
Bessie M. Devine	do	91	Amherst, M.I., Que.	136 16
Mist	do	48	Souris, P.E.I.	72 00
Landseer	do	94	Port Hawkesbury, N.S.	141 00
Reporter	do	79	Souris, P.E.I.	118 50
Oresa	do	82	Arichat, N.S.	123 00
Robin Hood	do	88	North Sydney, N.S.	132 00
Total		3,261		4,891 16

SUMMARY.

Total number of vessels	40
Total tonnage	3,261
Total amount received in fees	\$ 4,891

It will be noticed that there has been a falling off in the licenses taken out by United States fishermen this year. The reason, I think, is the great leniency with which the department have treated these fishermen, in many cases privileges being granted which really necessitated the taking out of a license, so of course, in the natural order of events, owners would not pay for a privilege (although it is only a nominal fee), when they could get the same thing without paying. Those who did take out and pay for licenses were much exercised over the same right being accorded to people who paid nothing.

During 1896 the number of licenses increased nearly 60 per cent, on account of the extra paragraph which was placed in the license warning United States fishermen with a license that if they sold stores of any description to vessel without such

license, immediate cancellation of the permit would ensue, and no license would be issued to the offending vessel in the future. The invariable conciliatory attitude of the Canadian Government for years to foreign fishermen I think is taking effect now, and it will probably be found that the licenses will become fewer.

The following is a statement of the number of licenses issued each season since 1888:

1888.....	36
1889.....	78
1890.....	119
1891.....	98
1892.....	108
1893.....	71
1894.....	53
1895.....	47
1896.....	77
1897	40

The returns of the large number of United States fishermen who make use of Sand Point, Shelburne County, N.S., generally the last port of call on the way home form an annex to this report, and will be found interesting.

THE MACKEREL FISHERY.

The catch has been very disappointing this year indeed. The fish caught were of large size, some of them going over three pounds in weight. They appeared about the same time off our shores as last year, and light hauls were made at Prospect, N.S., on May 17th. On May 22nd a number of United States fishermen were off Shelburne, N.S., with the cruisers "Kingfisher" and "Osprey" in company, the "Acadia" being more to the westward. Few mackerel were seen, the weather being excessively stormy and foggy, but a Gloucester seiner made a haul of some 14 barrels about 6 miles off Liverpool. This, I think, was the first catch by a United States vessel. The season was backward altogether. At the same date last year, May 22nd, the steamer from Yarmouth to Boston landed 1,500 barrels of fresh mackerel; this year she had only 80 barrels on board. On May 27th there were 60 sail of United States vessels off Prospect, with the cruisers "Curlew," "Osprey" and "Acadia" in company. One vessel, the "Marguerite Haskins," did well, catching 150 barrels.

The weather continued very rough and foggy throughout the spring, and up to the second week in June the mackerel fishery might be considered a total failure, no large body of fish being fallen with, and quite 35 vessels of the fleet not having had their tackle in the water at all. Very few had more than 50 barrels. The total catch of the Cape shore fleet up to this date (second week in June) amounted to under 2,000 barrels.

About this time accusations were brought against the United States fleet by our fishermen, charging them with maliciously sailing through and destroying nets. The alleged offence I thoroughly investigated, and found without foundation, although in some cases, no doubt, nets were unavoidably destroyed, but certainly not maliciously.

Cape shore mackerel were worth about \$10.25 per barrel. There were some very good catches made on Georges in July and August. At the beginning of September prospects seemed to brighten up in North Bay, and vessels were doing fairly well off Prince Edward Island. The mackerel being taken were of mixed size. They were schooling freely on Fisherman's Bank, in Northumberland Straits, off St. Peters, and the 1st and 2nd Chapels. These mackerel were selling in Boston for \$24 per barrel on September 8th.

A few catches were made off Sydney later in the fall, but on the whole the mackerel catch of 1897 may be looked upon as a bad failure. Their habits have changed very much; they no longer get together in large schools, but small quantities of fish are found here and there. This, I think, is largely due to diminished numbers. They are frightened by the purse seines which break up the schools and

scatter them all over the place. The seines are, and I have often pointed out, most destructive engines, and I would strongly recommend that their use should be prohibited by international agreement before the 1st of July, at any rate. The capture of these fish before they have spawned must eventually, as far as I can see, utterly destroy the fishery, and the very least protection that might be afforded them would be to prohibit the use of the purse seine before the mackerel have spawned. At present they have no protection whatever. When they are spawning they will not take the bait, but the purse seine gets them at all seasons. Not only does this method of fishing catch mackerel, but at the same time any other kinds of fish, more particularly herring, which are all thrown away.

I think it would be found that a very large percentage of masters of fishing vessels, both British and foreign, would concur in the prohibition of the purse seine. My own experience is exactly in the same way, and I trust the department will see its way to take some effective measures in the desired direction.

A short description of a purse seine taken from Professor Brown Goode's report may be of interest:

"A large seine used with a very large seine boat is about 210 fathoms in length and 30 fathoms deep, being deeper in the centre than at the wings. The boat end is about five fathoms deep, and the dory end varies from about 7 to 15 fathoms in depth. It is made of three kinds of twine. The trailing piece, which is a section of the net occupying about 10 or 12 fathoms along the centre of the cork line, and having the same depth as length is made of the stoutest twine. Beneath this and composing the remainder of the float and extending to the bottom of the seine is a section knit of twine a size smaller. There is also a band of large twine 15 meshes in depth, extending along the cork line of the seine on either side of the trailing piece to the extremity of each wing."

In one of the above engines it often happens that 100 barrels of fish are inclosed at one cast. Only a small portion are mackerel, the remainder being thrown overboard dead, and sinking to the bottom, foul the ground and drive off other fishes.

The list of United States fishing vessels boarded by Dominion Government cruisers in the Canadian waters on the Atlantic coast and Gulf St. Lawrence during the season of 1897, will be found as Annex B to this report.

LIST of Vessels (Seiners and Hookers) fishing in North Bay, Fall of 1897.

Date.	Name.	Home Port.	Master.
1897.			
	Jonh Smith.	Gloucester.	John Stewart.
	Reporter.	do	N. McPhee.
	Mist	do	Jas. McDonald.
	Epes Tarr	do	T. A. Irwin.
	Ralph E. Eaton.	do	John Thompson.
	Helen F. Whitten.	do	Thomas White.
	Landseer.	do	Jas. McDonald.
	Henry M. Stanley	do	Thad. Morgan.
	Davy Crockett.	do	Wm. Grant.
	S. F. Maker	do	B. F. Payson.
	Hattie M. Graham.	do	Joe. E. Graham.
	George F. Edmunds.	do	Wm. Corkum.
	F. W. Homans.	do	Richard Jackman.
	Effie M. Morrissey.	do	Charles Leaman.
	Alice M. Parson	do	James McLean.
	Alice C. Jordan.	do	J. H. Warren.
	Herald of the Morning	do	Levi N. McLean.
	Nellie Dixon.	Boston.	C. Ellsworth.
	Ethel B. Jacobs.	Gloucester.	Sol. Jacobs.
	Elsie M. Smith.	do	Frank Hall.
	Lizzie M. Center.	do	Joseph Smith.
	Lena and Maud.	do	J. W. McFarland.
	George S. Boutwell.	do	John Couzins.
	Norumbega.	do	John McKinnon.

Up-to-date vessels will not average bay catch over 25 barrels mackerel; several if not all the late fleet got nothing.

LIST OF Vessels which fished off Cape Shore, 1897.

Date.	Name.	Tons.	Home Port.	Master.
1897.				
May...	Abbie F. Morris	77	Gloucester.....	McLean.
	Abbie M. Deering.....	90	do	Rowe.
	Albert Geiger.....	53	do	Mehlman.
	Agnes E. Downe.....	81	do	Carrigan.
	Alice.....	85	Provincetown.....	Chase.
	Alice C. Jordan.....	82	Gloucester.....	Warren.
	Alice M. Parsons.....	72	do	Haymer.
	Annie C Hall.....	84	do	McLain.
	Annie Greenlaw.....		do	Greenlaw.
	Arthur Binney.....	112	Boston.....	Mahar.
	Braganza.....	91	Gloucester.....	Corkum.
	Carrie E. Phillips.....	110	Boston.....	Malloch.
	Centennial.....	110	Gloucester.....	Harty.
	Charles Levi Woodbury.....	100½	do	Cunningham.
	Commonwealth.....	81	do	Critchett.
	Davy Crockett.....	80½	do	Grant.
	Eddie Davidson.....	78	do	Cromwell.
	Edith D.....		do	Connelly.
	Edith M. Prior.....	106	do	Prior.
	Effie M. Morrissey.....	114	do	Leaman.
	Elsie F. Rowe.....	55	do	Gannon.
	Elsie M. Smith.....	107	do	Hall.
	Ethel B. Jacobs.....	125	do	Jacobs.
	Flora L. Nickerson.....	95	Booth Bay	Lewis.
	Frank A. Rockcliffe.....	99	Gloucester.....	Ellsworth.
	Frank H. Smith.....	70½	North Haven.....	Wylie.
	F. W. Homans.....	44	Gloucester.....	McDonald.
	Gatherer.....	91	do	Maguire.
	Geneva Mertis.....	42½	do	McCloud.
	George F. Edmunds.....	142	do	Corkum.
	Golden Hope.....	101½	do	McLean.
	Grace L. Fears.....	84½	do	Aiken.
	Grayling.....	115	do	Cameron.
	Harry G. French.....	95	do	O'Brien.
	Harvard.....	106½	do	Swim.
	Harry L. Beldon.....	117	Boston.....	Walen.
	Hattie Evelyn.....	66	Gloucester.....	Terry.
	Hattie E. Heckman.....		do	Hickman.
	Hattie M. Graham.....	133	do	Graham.
	Hattie and Lottie.....	96	Dennis.....	Nickerson.
	Helen F. Whitten.....	127½	Gloucester.....	White.
	Henriette Francis.....	74	Portland.....	Edwards.
	Henry Ellsworth.....	56	Gloucester.....	Gallant.
	Henry Morganthaw.....	85½	Portland.....	Dyer.
	Herald of the Morning.....	68	Gloucester.....	McLean.
	Henry M. Stanley.....	112	do	Morgan.
	Hiram Lowell.....	121	do	Nelson.
	Hustler.....	92½	do	Keene.
	Indiana.....	116½	do	Smith.
	Iolanthe.....	70½	do	Sparling.
	James A. Garfield.....	61	do	Grant.
	James G. Blaine.....	98	do	Nelson.
	Jennie B. Hodgdon.....	112	do	Hodgdon.
	Jennie P. Phillips.....		do	Doane.
	J. J. Clark.....	66	do	McLaine.
	John E. McKenzie.....	124	do	McKenzie.
	John S. Presson.....	88	do	Williams.
	Kearsarge.....	100	do	Mills.
	Landseer.....	94	do	McDonald.
	Latona.....	104	do	Croucher.
	Lena and Maud.....	New	do	McFarland.
	Lizzie Mand.....	79	Portland.....	Sparling.
	Lizzie M. Center.....	77	Gloucester.....	Smith.
	Lizzie Smith.....	73	Provincetown.....	Chase.

LIST of Vessels which fished off Cape Shore, 1897.—*Concluded.*

Date.	Name.	Tons.	Home Port.	Master.
1897.				
May....	Loring B. Haskell	91 $\frac{1}{2}$	Gloucester.....	Murphy.
	Lottie Gardner	111 $\frac{1}{2}$	do	Parriss.
	Lucille	96	do	Welch.
	Lucy W. Dyer.....	78	do	Staples.
	Mabel Kensington	78	do	
	Marathon.....	65	do (now lost).....	Hudder.
	Margaret Mather?	91	do	Miller.
	Marguerite Haskins.....	103	do	Harty.
	Margie Smith.....	58	do	Smith.
	Mariner.....	107 $\frac{3}{4}$	do	Stanley.
	Marshall L. Adams.....	125	Provincetown.....	Seavy.
	Maud S.....	75 $\frac{3}{4}$	Vine Haven	Reed.
	Mayflower.....	108	Gloucester.....	
	Mertie and Delmer.....	74 $\frac{1}{2}$	Chatham.....	Doane.
	Mertie H. Perry.....	59	Boston.....	Perry.
	Minerva.....	61 $\frac{1}{2}$	Gloucester.....	Hall.
	Minehaha.....	50	Swanscott.....	
	Mist	65	Gloucester.....	McDonald.
	M. S. Ayer.....	76	do	Thomas.
	Nellie Dixon.....	105 $\frac{1}{2}$	Boston.....	Poole.
	Nellie M. Davis.....	89	Gloucester.....	Doran.
	Nereia.....	92 $\frac{3}{4}$	do	Whitten.
	Norman Fisher.....	76	do	Anderson.
	Norumbega.....	120 $\frac{1}{2}$	do	McKinon.
	Oliver S. Killam.....	New	do	Killam.
	Oliver Wendell Holmes.....	102	do	Pitts.
	Ralph F. Hodgdon.....	86	do	Greenleaf.
	Richard Lester.....	69	do	McDonald.
	Ruth M. Martin.....	94	Boston.....	Ellis.
	Sea Fox	105 $\frac{1}{2}$	Provincetown.....	McGray.
	S. F. Maker.....	103 $\frac{3}{4}$	Gloucester.....	Payson.
	Sir Knight.....	76 $\frac{1}{2}$	Booth Bay	McKown.
	Speculator.....	105	Gloucester.....	McDonald.
	Stowell Sherman.....	87 $\frac{3}{4}$	Provincetown.....	Hatch.
	Talisman.....	118	Gloucester.....	McKay
	Wm. E. McDonald.....	93	do (since lost)	

101 vessels—Total catch in spring, 1,048 barrels.

LOBSTERS.

The lobster catch in nearly every locality has been small. It was bad enough last year, but even worse this, mainly due to the frequent and constant storms in May and June breaking up and destroying the fishermen's traps, etc., and doing an immense deal of harm to the business. The season was extended for nine days in the Gulf, and people who fished through July did not do so badly. Prices were fairly high, and this helped the fishermen out slightly.

I think the present laws for catching lobsters are about as good as can be made, but I have had intense trouble with fishermen who persist in fishing during the close season, and thousands of dollars worth of gear has been destroyed for being set illegally. The pack in Cape Breton was very bad indeed, not much more than half the average, and many fishermen hardly paid expenses, so much of their gear being destroyed by the storms. Lobsters do not come into shoal water when there is any chance of bad weather, and the extra expense of fishing in deep water is large. I think the small individual pack is due to the weather and not to any particular diminution in the fish themselves in this locality.

I am of the opinion, which I think, is generally shared, that there should be no lobsters caught north of Cape George after the 1st of July. By far the greater

quantity of spawn is cast after this date though no doubt not all. The regulation in regard to the size limit, although a good thing, is very nearly impracticable to carry out rigidly.

I append extracts from the Annual Report, and from Captains Dunn, Pearson, May, Kent, Pratt, Knowlton and Walbran, the last named an expert in British Columbian waters.

ANNEX A.

EXTRACTS OF REPORTS FROM CRUISER'S OFFICERS.

CAPT. C. T. KNOWLTON, *Commander of the Cruiser "Osprey,"* reports as follows:—
"In compliance with your order I will now hand you my report of work done by the Fisheries Protection Cruiser 'Osprey' under my command for the season of 1897.

"The 'Osprey' commissioned at Halifax on the 21st April with part of her crew. April 22nd, by order, proceeded and arrived at Shelburne 24th, where we took on board the remainder of our crew. We then took up our station between Halifax and Shelburne, with Lunenburg headquarters for mails until 10th May, when we went on the marine "slip" at Halifax, and painted bottom; the weather being very stormy we were detained for several days. On the 17th we proceeded to sea, weather still foggy, cruised eastward, passed through the Strait of Canso, arrived at Pleasant Bay, Magdalen Islands, 21st. I found a large fleet of fishermen baiting. Herring plentiful. There were only a few United States fishermen, mostly Canadian. Beside fishermen there was a large fleet of small vessels catching herring for the lobster factories at Prince Edward Island and Nova Scotia to be used for lobster bait. I found matters quite changed to what they were when I visited those islands in 1891. There were from twenty to thirty United States bankers and only a few Canadians. We remained in Pleasant Bay until the herring season was considered to be over, and on the 27th of May proceeded towards the southern coast of Nova Scotia to meet the mackerel fleet. 29th we were off Cape Canso with a fleet of twenty-two United States seiners. We continued to cruise with the fleet from Cape Canso to Sydney and back to Liscomb until the 9th of June, when the last of the fleet went westward. As a whole the fleet did very poorly, while some had fair trips others went home clean. We then took up station at Canso and cruised as far west as Liverpool, east to Louisbourg, with occasional runs to Prince Edward Island. In connection with protecting our coast from foreign fishermen, we had several other duties to perform, protecting the lobster and other fish until 23rd October, when we were instructed to proceed and take up our station off Sydney with the United States mackerel fleet. We proceeded on the 24th, and the same night were off Sydney with part of the fleet. 25th with a fleet of twenty we continued to cruise with the fleet between Cape Smoke and Scattari until 8th November, when part of fleet went west. On the 9th we followed and found tail of fleet at Louisbourg. We were detained at Louisbourg for several days, weather being stormy. 15th we proceeded and arrived at Halifax on the 16th. A very few had fair trips while others had very poor, and several went home clean having spent from three to seven weeks waiting and watching. 18th November we proceeded and arrived at Shelburne same day, where we cruised finding several United States trawlers on different occasions for shelter. On the 13th of December detained the United States trawler "Carrie E. Phillips" at Shelburne for infraction of customs laws. This vessel was released on deposit of \$200, and on 18th December I put "Osprey" into winter quarters and paid off crew."

Capt. W. H. KENT of the Cruiser "*Kingfisher*" reports as follows:—

"In March I received orders to commission the '*Kingfisher*;' on April 1st I proceeded to Shelburne, N. S., and superintended the painting and fitting up the ship for the season's work. On April 1st the crew were signed in, and ship placed in commission. After getting stores and provisions on board we proceeded, making Shelburne headquarters for mail and telegrams.

On the 10th April I received your telegram ordering me to the wreck of the SS. '*Assaye*,' stranded on Blonde Rock, to prevent unauthorized people from taking goods from the wreck. On the 12th we arrived at the wreck, where I found about twenty sail of vessels near by and a large number of men on board. I at once ordered them to leave the ship, which they did after some hesitation. The ship being abandoned, I proceeded to Pubnico for the night, returning next morning, when I found several sail of vessels and two steamers alongside helping themselves. I ordered them to leave the ship immediately, which they did. I then made an examination and found the wreck had been stripped of everything movable, a large quantity of dry goods cases were found with tops smashed in and contents gone. By all appearances the cargo must have been very valuable. That evening we ran back to Pubnico.

The next day I received a telegram from the Deputy Minister of Marine and Fisheries saying you were not in Ottawa; also stating it was not necessary to remain by the wreck any longer. As soon as weather cleared we proceeded back to our station off Shelburne and as far east as Lunenburg.

On the 1st of May, I with the crew, assisted in fitting out the cruiser '*Victoria*;' also by your orders, sent my second officer to assist Capt. Demers as far as Charlottetown, he not having a full complement of men.

On May 15th the first American seiners arrived at Shelburne. From that time they commenced to increase in number, but owing to the dense fogs which prevailed on the S. E. coast of Nova Scotia, it was hard to keep run of the fleet; in fact it was almost impossible to do so. I continued to cruise off Shelburne till 28th May, when we proceeded east, calling at Halifax, and on to the eastward seeing now and then one of the seiners when the fog would lift.

On arriving off Canso we fell in with about eighty sail of seiners which had given up the hunt, and were returning west with empty ships, as the mackerel had given them the go by in the fog.

The presence of so many seiners on our coast every spring certainly must be the cause of mackerel being so scarce, as they are continually harassed by seiners and nets. It is my opinion, unless there is some international agreement to prevent the continuance of wholesale slaughter and destruction which has been the cause of depleting our waters of this valuable fish, that mackerel fishing will soon be a thing of the past.

I spent some few days cruising about Chedabucto Bay and off Canso. On June 8th I received orders from you to proceed to Port Hawkesbury and put ship on marine slip for cleaning and painting. The next day we arrived and hauled over on the slip, and completed the necessary work. By the 11th, after waiting one day for paint to dry, we went on to Pictou, when the ship's company were measured for uniforms by Mr. W. H. McLaren, tailor.

From Pictou I proceeded by your orders to Souris, P.E.I., to take up my station off the East Point, P.E.I., where we remained till October 26th.

After the beginning of the lobster close season we spent a large part of the time looking after gear left out and fished contrary to law. I found and destroyed a number of traps off Launching also off Chepston. We made one trip to the Magdalen Islands on the same business, but the wheather came on so stormy I had to abandon the voyage, and get back to Souris, not without a taste of what the Magdalens are like in the fall, as we rode out one of the heaviest gales of the season in Pleasant Bay. I landed at Amherst for a short time only, but was not able to land again during my stay there.

The fleet did not arrive on my station till late.

"There was a small catch off East Point on the evening of the 26th August, but nothing after that. The seiners cruised all over the gulf, but could not find the fish, and had all left the gulf by October 26th for Sydney, Cape Breton, the last remaining place for the fall catch.

The fleet of Americans having left the gulf, acting on your orders, I proceeded to North Sydney, where I found twenty-two sail of seiners, the cruiser "Osprey" in company. They did very well at Sydney, the highest catch being one hundred and seventy-eight barrels. Whilst at Sydney I received a telegram from yourself ordering me to beat Halifax November 12th, to pay off. We left Sydney, November 4th, and proceeded west, but owing to the heavy gales prevailing, did not arrive at Halifax till the morning of the 16th, when I at once paid ship out of commission. The sails being wet, I had to remain with the chief officer and a few men to dry everything and store it away, which we completed by the 20th November, when I left for home via St John.

Our Fisheries Protection annual sports at Georgetown, P.E.I., were a grand success this year, and we hope next year to make them still better.

We were much pleased to have the honour during the summer of escorting the Governor General of Canada from Pictou to Charlottetown, and we hope to have the privilege of a like honour at some future time.

CAPTAIN GEO. M. MAY of the D.G.S. "*Constance*" says:—

According to your instructions of the 6th instant I have the honour to submit to you the following report for the season of navigation just closed, and beg respectfully to state that my officers and crew joined the "*Constance*" on March 20th.

On the afternoon of the 24th left our winter quarters and made fast to Crawford's Wharf, Quebec. After taking in a supply of coal and provisions we left port for the gulf early on the morning of the 30th.

On our way down the river we met ice in considerable quantities, especially between Crane Island and the Stone Pillars, but as it was pretty well scattered we had no difficulty in passing through, and at 6 p.m. moved at Murray Bay wharf for the night.

At 4 a.m. 31st, left Murray Bay and proceeded on down the river meeting no ice worthy of mention until nearing Bic, when we met in with large quantities, with wide open channels through it, we proceeded on down with the expectation of being able to reach Rimouski wharf, but on arriving off the east end of Barnaby Island we found the ice closely packed everywhere; we at once put about to return towards Bic, but before proceeding far the ice closed in on us where we had to remain jammed for the night.

On the 1st, 2nd and 3rd April owing to strong northerly winds we were unable to move, the ice being very heavy and closely packed as far as the eye could reach, during which time we drifted down by (or with) the current to near Matane, a distance of 45 miles.

On Sunday, 4th April, owing to change of wind, and probably current also, the ice began to open in large channels to the westward and north. At 2 p.m. we began to work our way slowly through the ice towards the open water some four hundred yards distant, which we succeeded in doing at 5 p.m., and at 8.45 p.m. anchored at Godbout for the night.

On the morning of the 7th April we anchored at Esquimaux Point where I received from Dr. Tremblay three barrels and five kegs of spirits seized by him at Agwanus, and returned to Rimouski on the 9th.

From the 11th to the 25th April we cruised along the south shore down as far as Cape Rosier, west point of Anticosti, and along the north shore, returning to Quebec on the 26th for a fresh supply of coal.

On account of a severe attack of muscular rheumatism, contracted through exposure to wet and cold, I was confined to my bed from the 28th April to the 6th of June, and on the 19th June had the pleasure of once more being able to join the "*Constance*."

During the above period the steamer continued her cruise in command of my chief mate, Mr. Wm. Caron, and under the instructions of Mr. Fred. L. Jones, chief preventive officer of Customs. From the 22nd June to the 14th August, our cruise was along the north and south shores of the Gulf St. Lawrence, Anticosti, and the Bay des Chaleurs.

From instructions received from Mr. Fred. L. Jones, we left Percé, county of Gaspé, on last named date for North Sydney, C.B., via the Magdalen Islands, arriving at Sydney during the night of the 15th. On the 19th August left North Sydney with Mr. Fred. Jones, and Converse J. Smith, Esq., of the United States Treasury Department, of Boston, Mass., on board for St. Pierre Miquelon, arriving there early the following morning. At 3 a.m. 23rd August left St. Pierre, and at 2 p.m. anchored in Placentia Bay, Newfoundland.

On the 24th crossed over to St. John's, Newfoundland, by railway with Messrs. Jones and Smith and returned at 3.30 p.m. next day, leaving immediately on our return for North Sydney, arriving at later place 10 p.m. 26th.

Friday 27th August we left Sydney for up the gulf via the Gut of Canso, and arrived at Gaspé for a fresh supply of coal on the 30th, after which we resumed our cruise about the gulf coast and River St. Lawrence, principally along the Gaspé coast to Bay des Chaleurs.

During the first week of October, information was sent to me that the schooner "Canada" had left St. Pierre Miquelon for the St. Lawrence with contraband spirits on board, and to keep up vigilant search for her. This we did, and on the 27th of same month were successful in boarding, and seizing her off St. Félicité, with thirty-three barrels of spirits on board, valued at about \$4,000.

From evidence given in court by the crew, (who were made prisoners) eleven barrels of whisky, two kegs and four boxes of gin, had been landed a few hours before the "Constance" hove in sight, by Téléphore Coulombe and one Bilodeau.

Several reports were in circulation that contraband spirits had been landed at various points during the summer, but on close investigation, in all cases they proved to be incorrect, and were believed to be circulated by the would-be smugglers themselves to cause a sensation, or to make a boast, and make believe that contrabands were landed in spite of the means taken by the government to suppress the traffic.

I may say here that very little smuggling is now done about the Gulf and River St. Lawrence compared to what it was previous to the "Constance" going into commission.

It is my firm belief that before the steamer was commissioned, not less than fifty vessels were employed in this illicit trade.

On one of my trips along the north shore, the last season I was master of the steamer "Otter," I saw no less than five schooners loaded with spirits from St. Pierre Miquelon, three in St. Nicholas harbour, and two in Mingan harbour all waiting a favourable chance to proceed up the river.

During the past season the "Constance" sailed over 19,250 miles. We boarded one hundred schooners, yachts and boats, and out of the whole could not find or trace anything whatever in the shape of contrabands or anything to cause the least suspicion until we met with the steamer "Canada."

But the gulf is long and wide, and I may say it is utterly impossible for one cruiser to be in the Bay des Chaleurs, watching the north shore, the south, and the River St. Lawrence at the same time. You will, sir, readily understand that when we are cruising about the Bay des Chaleurs and the Gaspé coast, it is difficult to know what is doing, or passing up along the north shore.

As regards my crew, they were all most efficient in their duties and discipline of the ship. Most of them, in fact I may say all of them, have been with me for several seasons and understand well the different duties they have to perform, especially the boarding and searching of vessels. This they do with a will and a determination that cannot be excelled and I will only be too glad to have the same willing, sober, and honest men with me so long as I have the honour to command the government revenue cruiser "Constance."

In conclusion, the "Constance" returned to port (Quebec) from her season's cruise on the 23rd November. She was placed in her winter quarters, in the Louise basin, on the 29th, and paid all hands off on the 30th, being eight months and eleven days in commission.

CAPTAIN GEO. W. PEARSON of the patrol cruiser "Dolphin" reports as follows:

After making some necessary repairs to the hull of the "Dolphin" I was ordered into commission on the 29th of April.

During the month of May and June I cruised chiefly on the north shore of Georgian Bay and through the North Channel where the illegal practice of seining and trap netting is carried on during these months, in these two months I was successful in seizing ten traps nets and five seines and two boats, and on two different occasions gave chase to seining parties.

On the 13th of July I was ordered to Lake Superior to take Overseer Elliott over his division to check over pound nets and make a general inspection of that portion of his division.

On the 18th of July we finished and locked down through the canal, having found everything in a satisfactory condition.

On the 19th of July I left Sault Ste. Marie for Little Current, having Overseer Elliott on board. We arrived at Little Current on the 20th, where Overseer Elliott's men had seized two boats and seines for illegal seining.

I assisted him with the cases against these men, and from the evidence produced confiscated the two seines allowing the men to go with a reprimand.

On the 21st and 23rd of July, in company with Overseer Elliott and his two men, we lifted and destroyed six trap-nets and one extra leader.

On the 24th, Overseer Elliott and his two men left the ship.

On the 26th of July I lifted and destroyed one trap-net at the entrance to Collins Inlet Channel. I then cruised toward Owen Sound when I shipped nine seines to Ottawa as per instructions.

During the month of August I lifted and destroyed seventeen trap-nets which I found by grappling in the vicinity of Bad River, Christian, Limestone and Sandy Islands.

On the 23rd of August I fined two men at the Umbrella Islands, twenty dollars each for illegal fishing with trap-nets.

During the month of September I destroyed eight more trap-nets which I found by grappling in the different places of my patrol, I also made six convictions for illegal fishing, fining each.

On the 15th of October I interviewed Mr. Wilmot, a game warden acting under the Provincial Government, who had seized nine hoop-nets from a fisherman whom he believed to be fishing illegally not knowing these nets were licensed.

The nets were afterwards returned and the fisherman allowed compensation for his loss.

During the month of November I seized eight pieces of gill-nets for illegal fishing in close season. I found that the close season had been well kept in comparison to other years.

During my season's work I found the regular gill-net men were law-abiding in every respect and gave me no trouble.

I would be pleased to recommend the carrying into effect the numbering of boats and net buoys, which would wonderfully assist the cruiser and overseers in detecting any that might be attempting to fish without license or otherwise illegally.

I found the fall fishing to be very light on account of the lateness of the trout coming on the shoals.

I have had numerous complaints from the gill-net men as to the privilege granted to the pound net men to fish for herring or rough fish during the month of November.

During the season's cruise we have covered 5,840 miles with the steamer besides over 3,000 miles of small boat work, which is quite necessary on my patrol, owing to the numerous small inlets and bays which cannot be reached with the steamer.

In conclusion I wish to say that if it was made a punishable offence for any one to furnish web for the purpose of making seines or trap-nets, where they are not allowed, it would be a great assistance to lessen the amount of illegal fishing with these nets.

CAPT. E. DUNN, of the Dominion cruiser "Petrel," submits his report for the season of 1897, as follows:—

In obedience to your instructions, the cruiser was fitted out and made a departure on the 27th April for Flower Pot Island, with Lt. Col. Anderson and party on board, to locate site for a new light station. The stations at Cove Island, Tobermory and Cabot's Head were also visited. The "Petrel" then returned to Owen Sound. On the 29th and 30th stormy weather made it impossible to adjust the compasses on the ranges, but on 1st May this work was accomplished, and a departure made for Lake Erie. The weather was very unfavourable, and did not reach Amherstburg until 5th May. A supply of coal was taken on, also a spar buoy, which was placed on Grecian shoal. I also visited the site of the wreck of the "Little Wissahickow," and finding one of the spars, which when the wreck was blown up, had disappeared, was floating heel up. A tow line was attached and the mast pulled clear from the wreck. This was towed to Rondeau harbour and given to the lightkeeper. On the 7th May, about 15 miles from the Canadian shore and midway between Rondeau and Port Stanley, sighted fish tug, which made off on our approach. I found net buoy, lowered both boats and lifted 74 American gill-nets containing 1,400 pounds of fish, chiefly pickerel and herring. These were taken to Port Stanley, where the nets were stored and the fish sold. From this date until the 22nd May, I patrolled the lake from end to end, when by instruction I proceeded to Windsor to assist in the celebration of Her Majesty's birthday. On the 24th the ship was dressed rainbow fashion and a royal salute of 21 guns was fired. On the 25th proceeded to Lake St. Clair, where I investigated the report of illegal fishing in Mitchell's Bay, continued on the 26th. On that evening I called at Peach Island with reference to the investigation of Overseer Boismier, which was fully reported upon. I again resumed the patrol of Lake Erie until the 12th June, when was I engaged in investigating the complaint of fishermen between Two Creeks and Rondeau. On the 14th June, second officer Jarvis left the ship on sick leave. On that date and the following day Overseer Lamarsh was taken over his division, when a small seizure was made by him, off Kingsville, of hooks and lines. On the 22nd assisted in the celebration of the Queen's Jubilee at Port Stanley, when the ship was dressed and a royal salute of 21 guns was fired.

On the 23rd June proceeded to the gas buoy off Pelee Spit light, where grappled for, and was successful in raising the anchor and spar buoy, which had been cut off by a propeller some feet below the water. The anchor and chain were placed on dock at Pelee Island, where they now are. The irons, etc., of spar buoy were handed over to Lightkeeper Hackett, of Bois Blanc. On the 24th was engaged by instruction to investigate the matter of unpaid licenses in ex-Overseer Wigle's division. On the 1st July celebrated Dominion Day at Port Stanley, where a salute was fired. Having been instructed to proceed to Lake St. Clair, with reference to illegal fishing, did so on the 10th July, taking Overseer Boismier over his division on that lake. Nothing of importance was discovered. On the 30th and 31st July located the wreck of the schooner "Adams" by the instructions of the department, finding the report of the wrecking company incorrect. On the 12th August sighted five tugs at work, one of them considerably to the north of the boundary, and engaged in setting nets, to this one I gave chase; she succeeded in crossing the boundary before I overhauled her. I returned and picked up three nets, all that they had succeeded in setting. On the 17th August disposed of the confiscated nets for the sum of \$104.60. On the 24th August, at the direction of the department, I proceeded to Leamington, to interview ex-Overseer Wigle with further reference to license fees. On the 26th August picked up a red spar buoy adrift, which was afterwards placed on North Harbour Reef. From the 30th August until 3rd September lay by the Michigan Wrecking Company's plant at work on the wreck of the schooner

"Adams," supervising the clearance to a depth of 20 feet required by the department. On the 30th September, by instruction, I conveyed Judge Horn and party to Pelee Island, for the purpose of holding a court of revision. On the 1st October they were conveyed back to Windsor. On the 4th October held an investigation with reference to the non-payment of license fees by the fishermen of Pelee Island.

On the 20th, investigated and reported upon the complaint of Mr. Macallum, of Dunnville, with reference to irregularities reported by him of United States fishing steamers.

On the 22nd, by request of collector Gott of Amherstburg, I swept over the wreck of the "Grand Traverse" finding only a depth of 17 feet thereon; 25 feet was reported by the American Wrecking Company.

On the 26th, I seized foreign gill-nets, off Morgan's Point, near Port Colborne, containing a small quantity of fish. These with the nets were sold in Port Colborne. On 1st Nov., the Dominion Commissioner of Fisheries, Prof. Prince, came on board together with Mr. McGregor, M. P., with several others, who were conveyed among the Canadian islands and back to Windsor. On the 4th Nov., observed an United States fish tug at work, near but over the boundary, gave chase, but was unable to overtake it before crossing the line; after this I proceeded to Port Stanley to carry out the instructions with reference to the raising of the wreck of the schooner "H. P. Murray." For the first two or three days rough weather prevented any work being done, but on the 8th work was commenced on the wreck and by midnight the vessel was pumped out. On the following day the vessel was taken out of the harbour to the eastward of the piers and out of the way of navigation where it was grounded.

On the 18th and 20th was engaged in taking up the gas buoys in Pelee Passage and on the 22nd lifted the spar buoys from Grecian shoal and North Harbour Reef. These, together with the gas buoys, were given in charge of light-keeper Hackett, of Bois Blanc Island. On the 26th, the ship and ship's company were inspected by you at Windsor, and was much pleased at your expressions of gratification at the appearance of the ship and ship's company.

On the 28th, departed for Owen Sound to lay up in winter quarters, arriving on the 3rd December, when ship was placed in winter quarters and crew paid off on the 4th,

REMARKS.

It affords me great pleasure to call your attention to the effectiveness of the system of patrol, maintained on Lake Erie. Knowing that formerly the movements of the steamer were closely watched and reported to the fishermen I instituted irregular runs, doubling back at times to frustrate any information they might have received as to my course and destination. I was informed by Captain Williams, that he overheard a telephone message, in which the party, a foreign fish dealer, expressed himself to the effect that they could never tell where the "Petrel" was. With but few exceptions the tugs kept on their own side, and I was frequently asked by the United States fishermen, where they might safely set their nets. I always gave them this information and the different bearings, so that they would not cross the line in ignorance of their position.

In the fall a continuous patrol was maintained over the spawning grounds, and I have not a single violation to report.

The catch of fish in Lake Erie was, in most of the divisions, superior to last season. The Long Point Company caught more with 7 nets on the outside of Long Point than was caught by them the previous season with 14 nets, inside and out. The fishing was also good from Long Point to Point Pelee. The fishing at the two ends of the lake was reported light.

The distance logged by the "Petrel" during the season was 16,301 miles.

CAPTAIN J. T. WALBRAN, of *D. G. S. "Quadra," Victoria, B.C.*, states that the work for 1897 commenced on 3rd January, when I left Victoria for a month's patrol of Hecate Strait, with orders to warn all foreign fishing vessels they were not

allowed to fish there, or in any other of the territorial waters of British Columbia. I made Refuge Bay, on Porcher Island, my headquarters, and when the weather was suitable made frequent cruises in the neighbourhood visiting the halibut grounds.

During my patrol I met with only one United States fishing vessel which after receiving my warning proceeded on the Alaskan waters. The fishing in the Strait during my stay, was entirely carried on by the Canadian steamers "Capilano," "Coquitlam" and "Thistle."

Some time in April, I was informed that when the "Quadra" had discontinued her watch over the strait, and had been gone about 10 days, the United States fishing steamer "Edith" made her appearance again on the grounds, and also three sailing vessels, two of the latter making Butler Cove their headquarters.

The "Quadra" returned to Victoria from Hecate Strait at the beginning of February and during that month and March was off duty, the crew employed painting and cleaning the holds, etc., and the engineer's staff overhauling the machinery.

On the 27th of April a short cruise was made to Cla-oose to hold an investigation into some complaints which had been forwarded to the department by the lighthouse keeper at Carmanagh.

On the 6th June I proceeded for a cruise along the west coast of Vancouver Island calling at the principal Indian villages, where I informed the inhabitants that fishing with seines was strictly prohibited. In Quatsino Sound, two fishing weirs which obstructed the ascent of salmon up the Maad and Marble Rivers, and which had been placed in position by the neighbouring Indians, were destroyed and progress allowed the fish. Returned to Victoria on 16th June; on the 28th June I proceeded for another cruise along the west coast, in the interest of the sealing industry, to see that the Indian hunters, etc., after duly signing articles, joined their vessels. All villages were visited, frequented by the sealing schooners, and at each place a meeting held at which Indians stated they would join their respective vessels and these promises were carried out with the exception of some Indians at Catala Island, Esperanza Inlet. The Indians here refusing to join their ship, the "Arietis," were arrested, and the case tried on the "Quadra" by myself in my capacity as a stipendiary magistrate. After a thorough investigation with the case, the Indians were convicted but as several extenuating circumstances in favour of the latter were brought out during the trial, the court was adjourned for twelve hours to allow the prisoners to consider whether they would join their vessel and do their duty or be punished according to the statute. In the morning they all agreed to join, providing the articles were filled out as had been promised them when signing, and this having been done before me, the Indians went on board their ship, and thus this troublesome incident was concluded in a satisfactory manner to all concerned.

I wish to point out in connection with this case, the great advantage it was to the sealing community, that I was enabled as a magistrate to try this case on the spot where the offence occurred, for had I not been in a position to do so, the prisoners and witnesses would have all had to be sent to Victoria for trial, thus causing great delay and expense to the owners and captain of the vessel. I returned from this cruise on 8th July, and on the 20th left Victoria for Rivers Inlet on fishery service. Information had been received from the managers of the canneries in the inlet, that it would be desirable to have the presence of the "Quadra" there for a short time as many United States fishing sloops and other illegal vessels were in the neighbourhood. On my arrival the strange vessels had disappeared, as a rumour, a few days before, had gone round the canneries that the fishery cruiser had been sent for and was coming. Before leaving the inlet, I investigated a complaint made by the majority of the canneries that the fishing limit on the Wannock River was placed too far up the stream, found this to be the case, and recommended in my report to the department, dated 28th July, that the fishing limit should be placed at least 600 yards down the stream. I returned to Victoria on 27th July.

On August 12th I made a seizure at Becher Bay of a seine and large canoe which was being illegally used by the Indians there in catching salmon for commercial purposes.

On the 29th of the same month the "Quadra" was placed at the disposal of the Department of the Interior, and I proceeded to Wrangel, Alaska, with Mr. W. T. Jennings, surveyor, and his party.

On 30th September, the "Quadra" was again placed at the disposal of the Department of the Interior and I conveyed the Honourable Clifford Sifton with a large party and a detachment of the North-west Mounted Police to Skaguay and Dyea. The ship was at anchor off Skaguay fourteen days whilst the Minister and a small party crossed over the Dyea Pass to Tagish Lake, returning to Skaguay via the White Pass. On the return journey the "Quadra" visited Juneau, Takee Inlet, the upper part of which inlet was completely blocked with ice, Port Simpson and Mettah-cattah, returning to Victoria on 2nd November.

On 19th November the "Quadra" proceeded on fishery service to the west coast of Vancouver Island to investigate the complaints which had reached Victoria about the Indians at Clayoquot fishing with seines. I found the complaints correct, but fishing for the season was over, so I gathered the Indians of the neighbourhood together and warned them of the consequences of such conduct. On my return from the cruise on the 24th, a report was forwarded to the Department of Marine and Fisheries with my suggestions to remedy this illegal fishing by the nation of Clayoquot Sound.

CAPT. J. H. PRATT, of the cruiser *Curlew* forwards his annual report on the operations of the "Curlew" during the past season as follows:—

During the winter the ship was laid up at St. John, N.B., and all necessary repairs were made to the machinery.

Orders were received from you to place the ship in commission on 15th April and on that date the colours were hoisted, and the ship's company signed the ship's book. Stores were taken on board, and on the 16th we steamed down the bay to the Passamaquoddy district. Small herring suitable for sardine purposes were just beginning to strike in down there, and the weirs were making fairly good catches. Several United States fishermen had been anchored off Eastport wishing to procure bait for bank fishing, and they only succeeded in getting a moderate quantity.

Line fish were also coming into the bay in small schools and the fishermen were making fairly good catches.

Issuing weir licenses and attending to various duties with the local officers in connection with the management of herring weirs, occupied our time till 5th May, when receiving orders from you we cruised around to Shelburne.

There you joined the vessel and cruised to Yarmouth with us, issuing final instruction for the season's work.

Cruising in the vicinity of Cape Sable until on the 22nd of May we anchored at Liverpool, among a fleet of 16 United States seining schooners. Next morning getting under way at daylight we sighted an additional 31 seiners hailing from the United States also, and standing off shore, from behind Mosher's Island.

From this date to the last of the month mackerel began to show themselves along shore and a few hauls were made by the seining vessels. The nets along the shore also got moderate catches.

At the beginning of June we cruised to the eastward of Halifax, and on the 4th we sighted the fleet between White Head and Louisbourg. Very few fish were being taken by the fleet, and they accounted for the small catch by the unusual amount of fog and stormy weather that they had experienced during the previous month.

On the 8th of June we cruised to North Sydney, finding no foreign fishing vessels there.

Next day we returned to the westward, enforcing the lobster regulations in the numerous harbours between Canso and Halifax, and found that the fishermen and factories were obeying the regulations.

We arrived in the Bay of Fundy again on 19th June, and found that fishing of all kinds had been fairly good during our absence in Cape Breton.

Acting on your orders I proceeded to St. Stephen on 20th June to assist the town authorities in the appropriate celebration of the Queen's Jubilee. We were

well received by the town authorities, and on Jubilee day thousands visited the ship and 14 of the ship's company took part in the parade. Orders were also received from you to be at Calais, Maine, at the celebration held there on 5th July. We were well received by the mayor and other civic officials, and given a prominent place in the procession. Large numbers of the inhabitants inspected the ship during the day.

During September and October we were employed preventing illegal lobster fishing to the eastward of Halifax, and on 5th October, we were at Georgetown, P.E.I., with the other ships of the fleet.

We took part in the two days' sports held there by the Fisheries Protection Service under your command, which were greatly enjoyed by the crew of this vessel. At the shooting competition held on the first day of the sports, a team of five men from this ship were fortunate enough to win the handsome silver challenge cup, competing against some very good teams from the other ships.

I might be pardoned for saying here that the bringing of the ships together for those friendly competitions will have a most beneficial effect in making the ship's companies acquainted with one another, and also in an interchange of ideas which will promote that friendly feeling which should exist in this service.

On 12th October we had the honour of escorting the flagship "Acadia" (which vessel had on board Lord and Lady Aberdeen) from Pictou to Charlottetown, and with the blue jackets and officers from other ships, were inspected by His Excellency the Governor General on the parade grounds at the latter place.

We cruised on the Nova Scotia coast preventing illegal lobster fishing till the middle of November when you ordered our return to the Bay of Fundy.

On the Nova Scotia coast to the eastward of Halifax, I found that cod fishing had been very poor all year, which accounted for so many people being engaged in illegal lobster fishing. I found many of the people in very poor circumstances, owing to this failure in line fishing.

Previous to our return, however, the accidental drowning at Ship Harbour, of one of the seaman cast a deep gloom over our ship. All the boats were absent from the vessel, looking after illegal lobster fishing, when the boat containing this young man among her crew was capsized, and he did not rise to the surface.

With the aid of grapples his body was recovered next morning. An inquest was held, and his body shipped to his home at Tiverton, N.S., by way of Halifax.

Arriving in the Bay of Fundy on the 20th November the taking of the fishermen's bounty claims was begun, and that work, together with arranging various fishery matters, occupied our time till 12th December. On that date we steamed to St. John, discharged the crew and put the ship out of commission. The next day I placed the vessel in winter quarters in Magee's dock, and the engineer's staff began overhauling machinery.

Few reports were heard during the season of United States seiners poaching owing to the vigilant patrol kept up by the several cruisers over the whole coast. The catch of mackerel by the United States vessel was far below the average, some of them after several weeks cruising, did not catch a single mackerel.

The lobster catch of the Nova Scotia coast, has also been less than the previous seasons but the prices paid to the fishermen were fairly good.

ANNEX B.

LIST of United States Fishing Vessels, boarded by Dominion Government Cruisers, in Canadian waters, on the Atlantic coast and in the Gulf of St. Lawrence, during the season of 1897; showing Port of Registry of each vessel, tonnage and number of men on board, &c.

No.	Name of Nessel.	Port of Registry.	No. of Tons.	No. of Men.	License or no License.	Date, Left Home.
1	Atlanta.....	Gloucester.....	98	18	No...	20th April, 1897.
2	Arthur Binney.....	Boston.....	112	17	No...	10th May, 1897.
3	Annie Wesley.....	Gloucester.....	88	19	Yes...	28th March, 1897.
4	Alice R. Lawson.....	do.....	115	19	Yes...	1st April, 1897.
5	Annie C. Hall.....	do.....	84	17	No...	20th May, 1897.
6	Annie Greenlow.....	do.....	102	17	No...	20th April, 1897.
7	Alice M. Parsons.....	do.....	72	17	No...	15th May, 1897.
8	Agnes E. Downs.....	do.....	80	17	No...	20th do 1897.
9	Arthur E. Story.....	do.....	98	18	No...	25th June, 1897.
10	A. R. Atwood.....	Waldoboro. Me....	41	5	No...	10th Aug., 1897.
11	Alice C. Jordan.....	Gloucester.....	82	17	No...	10th Sept., 1897.
12	Bessie M. Devine.....	do.....	91	18	Yes...	1st April, 1897.
13	Charles Levi Woodbury.....	do.....	100	17	No...	15th May, 1897.
14	Commonwealth.....	do.....	81	17	No...	5th do 1897.
15	Carrie E. Phillips.....	Provincetown.....	110	18	.....	15th do 1897.
16	Cecil H. Lowe.....	Gloucester.....	75	13	No...	1st Aug., 1897.
17	D. L. Grafton.....	Salem, Mass.....	38	11	.....	15th do 1897.
18	Dora A. Lawson.....	Gloucester.....	119	17	.....	20th May, 1897.
19	Davy Crockett.....	do.....	81	17	Yes...	1st Sept., 1897.
20	E. C. Hussey.....	Beverly, U.S.....	81	16	No...	.....
21	Electra.....	Gloucester.....	84	16	Yes...	1st April, 1897.
22	Emma.....	Portland.....	77	16	No...	20th May, 1897.
23	Edith M. Prior.....	Gloucester.....	105	17	No...	10th do 1897.
24	Eva M. Martin.....	Ellsworth, Me....	11	3	.....	.....
25	Ella McDoughty.....	Portland.....	51	16	.....	14th do 1897.
26	Elsie M. Smith.....	Gloucester.....	106	18	No...	10th April, 1897.
27	Elsie M. Rowe.....	do.....	35	15	No...	15th May, 1897.
28	Elnora.....	do.....	85	17	.....	5th July, 1897.
29	Emma and Hellen.....	do.....	62	18	No...	1st do 1897.
30	Eben Parsons.....	do.....	86	13	.....	20th do 1897.
31	Emma E. Wetherall.....	do.....	104	18	.....	.....
32	Epes Tarr.....	do.....	67	16	Yes...	25th July, 1897.
33	Edward B. Holmes.....	do.....	68	13	No...	10th Aug., 1897.
34	Ethel B. Jacobs.....	do.....	125	18	No...	10th Sept., 1897.
35	Effie M. Morrissey.....	do.....	114	17	No...	10th do 1897.
36	Einma M. Dyer.....	do.....	74	14	.....	15th Oct., 1897.
37	Edward A. Rich.....	do.....	79	16	.....	15th do 1897.
38	Frank A. Rackliff.....	do.....	99	17	No...	1st May, 1897.
39	F. W. Homans.....	do.....	63	14	No...	12th Sept., 1897.
40	Florence.....	do.....	63	13	.....	27th do 1897.
41	George Bothwell.....	do.....	65	8	No...	8th May, 1897.
42	Grayling.....	do.....	115	18	.....	15th do 1897.
43	Gladstone.....	do.....	74	18	Yes...	15th June, 1897.
44	George F. Edmunds.....	do.....	142	17	No...	10th Sept., 1897.
45	Golden Hope.....	do.....	101	17	.....	27th do 1897.
46	Hattie B. Palmer.....	Waldoboro. Me....	30	3	.....	.....
47	Henrietta Frances.....	Portland.....	73	17	.....	15th May, 1897.
48	Hustler.....	Gloucester.....	92	17	No...	15th do 1897.
49	Harry L. Belden.....	Boston.....	117	18	.....	10th May, 1897.
50	Helen F. Whidden.....	Gloucester.....	127	16	No...	12th do 1897.
51	Hattie H. Knowlton.....	Boston.....	34	9	.....	15th Aug., 1897.
52	Henry M. Stanley.....	Gloucester.....	110	16	No...	1st Sept., 1897.
53	Herald of the Morning.....	do.....	68	16	No...	1st do 1897.
54	Hattie M. Graham.....	do.....	134	14	.....	27th do 1897.
55	Harvard.....	do.....	106	17	No...	8th Oct., 1897.
56	Hattie A. Heckman.....	do.....	105	19	.....	5th do 1897.
57	Henry W. Longfellow.....	do.....	78	14	No...	25th Sept., 1897.
58	Iolanthe.....	do.....	71	17	.....	20th April, 1897.
59	J. R. Atwood.....	Waldoboro, Me....	42	3	.....	10th do 1897.
60	Jennie B. Hodgdon.....	Gloucester.....	112	18	No...	5th May, 1897.
61	J. J. Clarke.....	do.....	68	16	.....	15th April, 1897.

List of United States Fishing Vessels, boarded by Dominion Government Cruisers,
in Canadian waters, &c.—*Concluded.*

No.	Name of Vessel.	Port of Registry.	No. of Tons.	No. of Men.	License or no License.	Date, Left Home.
62	J. G. Blaine.....	Gloucester.....	98	17	.....	1st May, 1897.
63	John S. Presson.....	do	89	16	No...	8th do 1897.
64	John Smith.....	do	62	14	No...	15th July, 1897.
65	Julia E. Whalen.....	do	96	18	Yes...	6th Sept., 1897.
66	Josie M. Calderwood.....	do	86	15	.....	26th do 1897.
67	James A. Garfield.....	do	70	12	No...	10th Oct., 1897.
68	Lotona.....	do	103	17	No...	20th April, 1897.
69	Louis & Rosie.....	Booth Bay, Me...	74	17	No...	15th May, 1897.
70	Lucille.....	Gloucester.....	99	17	.....	15th do 1897.
71	Landseer.....	do	94	15	Yes...	20th Aug., 1897.
72	Lena & Maud.....	do	75	17	No...	10th Sept., 1897.
73	Lizzie M. Centre.....	do	77	17	No...	10th do 1897.
74	Lizzie A. Parkhurst.....	do	115	18	Yes...	20th do 1897.
75	Lorna Doon.....	Essex, Mass	69	13	No...	1st Oct., 1897.
76	M. S. Ayer.....	Gloucester.....	76	16	No...	8th May, 1897.
77	Maggie & May.....	do	88	19	Yes...	15th April, 1897.
78	Mabel D. Himes.....	Beverly, U.S.....	92	18	Yes...	7th do 1897.
79	Margaretta.....	do	107	18	Yes...	15th do 1897.
80	Mystery.....	Gloucester.....	114	16	Yes...	1st do 1897.
81	Madonna.....	do	104	18	Yes...	5th do 1897.
82	Marathon.....	do	46	7	No...	20th do 1897.
83	Mist.....	do	68	16	Yes...	8th May, 1897.
84	Mariner.....	do	107	17	.....	18th do 1897.
85	Margie Smith.....	do	58	17	.....	15th do 1897.
86	Monitor.....	do	104	17	.....	6th June, 1897.
87	Mary F. Smith.....	Waldoboro, Me...	32	2	.....	.....
88	Maddena.....	Gloucester.....	110	18	.....	31st July, 1897.
89	Marshall L. Adams.....	Provincetown.....	125	18	Yes...	8th Oct., 1897.
90	Mary Story.....	Gloucester.....	63	10	No...	20th Sept., 1897.
91	Nellie G. Davis.....	Friendship, Me...	36	3	.....	.....
92	Nellie Dixon.....	Boston.....	105	18	No...	8th May, 1897.
93	Notice.....	Gloucester.....	63	12	No...	15th do 1897.
94	Norumbega.....	do	120	16	No...	20th do 1897.
95	Nellie M. Davis.....	do	89	17	.....	1st do 1897.
96	Nellie Buras.....	Portland.....	45	14	Yes...	25th June, 1897.
97	Orpheus.....	Gloucester.....	105	16	.....	8th April, 1897.
98	Oliver Wendell Holmes.....	do	101	17	No...	15th May, 1897.
99	Orient.....	do	89	16	.....	14th do 1897.
100	Oresa.....	do	80	16	No...	10th Sept., 1897.
101	Parthea.....	do	77	19	Yes...	1st April, 1897.
102	Pinta.....	do	94	18	Yes...	20th Sept., 1897.
103	Ruth M. Martin.....	Boston.....	94	17	No...	5th May, 1897.
104	Ralph Hodgdon.....	Gloucester.....	86	16	No...	15th do 1897.
105	Richard Lester.....	do	69	16	No...	8th do 1897.
106	Ralph Eaton.....	do	68	15	Yes...	25th July, 1897.
107	Reporter.....	do	78	16	Yes...	25th do 1897.
108	Robin Hood.....	do	88	17	No...	1st Oct., 1897.
109	Speculator.....	do	104	17	No...	.....
110	Sea Fox.....	Provincetown.....	105	17	No...	14th May, 1897.
111	Senator Salisbury.....	Gloucester.....	102	18	Yes...	1st April, 1897.
112	Senator.....	do	104	17	.....	6th June, 1897.
113	S. F. Maker.....	do	104	17	No...	10th Sept., 1897.
114	Volunteer.....	do	102	18	Yes...	16th May, 1897.
115	Vigilant.....	do	78	15	.....	10th Sept., 1897.
116	Viking.....	do	62	14	.....	6th Oct., 1897.
117	Winona.....	do	104	18	Yes...	1st April, 1897.
118	William E. McDonald.....	do	93	16	.....	1st May, 1897.
119	W. F. Whitten.....	do	127	17	.....	8th do 1897.
120	W. A. Morrissey.....	do	117	18	.....	31st July, 1897.
Total.....			10,360	1,872	.....	.....

MEMO.—13 vessels left home on or before the 10th April.

9	do	between the 10th April and 1st May.
33	do	do 1st May and 15th May.
12	do	do 15th May and 1st June.
56	do	after the 1st of June.

FISHERIES INTELLIGENCE BUREAU.

There is the same number of reporting stations as last year, 55 all told. Mr. Hutchins, the clerk in charge in Halifax, has kept myself and the public very well posted in regard to the movements of the fish, and has performed his duties to my satisfaction.

Appended is a list of reporters, also the annual report of the Fisheries Intelligence Bureau.

The whole most respectfully submitted,

O. G. V. SPAIN,

Commander of the Fisheries Protection Service of Canada.

List of Fisheries Bureau Reporters outside the Civil Service.

Residence.	Name.	Allowance.
		\$ cts.
Beaver Harbour, N.B.	E. W. Cross	15 00
Bloomfield, P.E.I.	John Doyle	15 00
Caraquet, N.B.	Miss E. D. Chenard	15 00
D'Escousse, C.B.	R. F. Bourke	15 00
Escuminac, N.B.	J. J. Keary	15 00
Gaspé, P.Q.	J. J. Annett	15 00
Grand Manan, N.B.	E. A. Calder	15 60
Grand River, P.Q.	Mrs. John Carbery	15 00
Ingoish, C.B.	E. B. Burke	15 00
Isaac's Harbour, N.S.	S. R. Giffin	15 00
L'Ardoise, C.B.	John McIsaac	15 00
Long Point, P.Q.	John Vibert	15 00
Lunenburg, N.S.	W. A. Zwicker	15 00
Magdalen Islands	J. A. LeBourdais	15 00
Meat Cove, C.B.	Alex. B. McDonald	15 00
Newport Point, P.Q.	Mrs. Meunier	15 00
Paspébiac, P.Q.	Miss Ada Beck	15 00
Percé, P.Q.	Miss Kate Beck	15 00
Point St. Peter, P.Q.	Mrs. P. Bond	15 00
Salmon River, N.S.	J. H. Whitman	15 00
Seven Islands, P.Q.	P. R. Vignault	15 00
Shippegan, N.B.	Mrs. A. Hamon	15 00
S. W. Point, Anticosti	Miss Grace Pope	15 00
Whitehead, N.S.	C. H. Felthmate	15 00
Yarmouth, N.S.	F. L. Hatfield	15 00

List of Fisheries Bureau Reporters who are Government Officials.

Residence.	Name.	Allowance.
		\$ cts.
Alberton, P.E.I.	J. P. Brennan	15 00
Arichat, West, C.B.	C. P. LeLacheur	15 00
Bayfield, N.S.	E. G. Randall	15 00
Campobello, N.B.	A. J. Clarke	5 00
Canso, N.S.	Thos. C. Cook	15 00
Cheticamp, C.B.	S. Aucoin	5 00
Digby, N.S.	C. E. Aucoin	10 00
Gabarus, C.B.	J. M. Viets	15 00
Georgetown, P.E.I.	R. McLean	15 00
Hawkesbury, C.B.	Chas. Owen	15 00
Liverpool, N.S.	J. C. Bourinot	15 00
Lockeport, N.S.	J. H. Dunlop	15 00
Louisburg, C.B.	J. R. Ruggles	15 00
Mabou, C.B.	P. O'Toole	15 00
Malpeque, P.E.I.	Louis McKeen	15 00
Margaree, C.B.	J. M. McNutt	15 00
Musquodoboit Harbour, N.S.	M. A. Dunn	15 00
North Sydney, C.B.	George Rowlings	15 00
Petit-de-Grat, C.B.	A. G. Hamilton	15 00
Port Hood, C.B.	P. T. Fougere	15 00
Port La Tour, N.S.	E. D. Tremaine	15 00
Port Medway, N.S.	J. W. Taylor	15 00
Port Mulgrave, N.S.	E. E. Letson	15 00
Pubnico, N.S.	David Murray	15 00
Sand Point, N.S.	J. A. D'Entremont	15 00
Spry Bay, N.S.	R. H. Bolman	15 00
St. Ann's, C.B.	W. C. Henley	15 00
St. Peter's, C.B.	D. McAulay	15 00
	D. Urquhart	1500

ANNEX C.

DETAILED REPORT OF THE FISHERIES INTELLIGENCE BUREAU.

HALIFAX, N.S., 30th November, 1897.

Commander O. G. V. SPAIN,
In charge Fisheries Protection Service of Canada.

SIR,—I have the honour to submit the annual report of the Fisheries Intelligence Bureau for the season 1st May to 15th October, 1897.

NOVA SCOTIA.

BAYFIELD.

Herring struck in plentifully about the last of April and during the first week of May several nets had 4 barrels each. Although only light catches were made during the second and last weeks of May and June the average has been fairly good.

Lobsters were reported in light quantities on 4th May, but the catches did not improve until the 14th, from which date they varied from good to fair until 7th June; with the exception of some fair catches from 18th to 24th June inclusive, the fishery was poor until it closed on 12th July. The season's catch is considered in excess of that of 1896.

Mackerel did not strike this year until about the 19th June from which date light but regular catches were made until 19th August when there was a slight improvement; and until 3rd September the average catch was fair. During the remainder of September no fish were taken owing to heavy northerly winds in the bay.

Salmon were first taken on 15th June, but as all nets were not set the catches were light until the 27th, when they became fair and remained so until about 12th July, from which date the catches were light until the close of the season. It is reported that the total catch is the smallest known for the number of nets set.

CANSO.

Codfish.—The inshore catch of codfish shows but little improvement over 1896 up to this date. The outfit was about the same and bait was about as usual, owing to stock kept in freezer making up for greater scarcity of squid on the grounds.

It must be admitted that the inshore fishing grounds show a growing scarcity of codfish, and the fishermen of fifty years ago tell strange tales of catches made then within a stone's throw of the shore, that cannot be duplicated now.

It is not easy to account for this. Perhaps the many thousands of lobster traps which line our shores up to the first or middle of July have something to do with it, and it may be that the increased outfit for fishing and increased traffic of steamers and sailing vessels disturbing the inshore waters are factors in producing this result.

The bank fishermen, as a rule, found no difficulty in making their summer trip, though some vessels went home with poor fares. The catch of the Nova Scotia bankers must be up to the average. Fewer vessels start in the early spring for fish, and many make but one trip for the season, beginning in the latter part of May or first of June. The spring trip, as a rule, was an unprofitable one.

Haddock.—The spring catch of haddock was a failure, but the summer catch up to September was an improvement on 1896. The September catch which in 1896 was a good one, was this year almost a complete failure, only about one-fifth of that of 1896. At the time of writing (23rd October) it shows some improvement. It was supposed there was never a scarcity on the outer grounds, and a firm here fitted out a steamer with twenty-four thousand hooks for haddock fishing on the Middle Ground forty-five miles distant. The result, so far, has been disappointing, only few haddock having been caught, but it is too soon to pronounce the enterprise a failure. This boat has made some good catches of codfish on Canso Bank, twenty-five miles distant, bringing in as high as thirty thousand pounds of codfish as the result of one day's fishing.

During the autumn the waters of this coast seem to swarm with dog-fish, which interfere greatly with the business of catching edible fish. On her last day out the haddock steamer "Sea Bird" had a dog-fish on about every hook. Before the trawl reached the bottom it was strung full of them. It is to be regretted that some use cannot be found for these fish.

Mackerel.—The spring and summer catch of mackerel was disappointing in the most of localities. Some fairly good catches were made in Chedabucto Bay, but on the western and Cape Breton shore very few were taken. The mackerel taken were of very large size, averaging about two pounds each, while many of them went nearly double that weight. A few mackerel, supposed to be of the fall run, have been taken in October. It remains to be seen what the final result of the fall catch will be, but as there has been a great scarcity of mackerel in the North Bay the fishermen are not hopeful of doing well.

Those caught up to date are mixed as to size, averaging not much over a pound and a half, and do not appear to belong to the same school of fish as those which passed north in June. The question is what has become of the June school. It was reported last year that large bodies of mackerel had been seen on the coast of Labrador, and this year at least one Massachusetts vessel went down that coast to reach the mackerel in their haunts. The result is not yet known.

Herring.—The June and July catch of fat herring was a failure on the whole coast. In August there was a fair catch in some localities, notably in the vicinity of Isaac's Harbour in the western end of this county. It is difficult to tell what the September catch would have been. Poor herring are so little in demand that there is very little interest taken in the catching and curing of them, and no doubt the September catch would have been ten times as large had there been an active demand for them.

Herring have ceased to be a large factor in the fish production of Nova Scotia. They are valuable in some parts of the province for lobster bait, Clark's Harbour alone requiring some five thousand barrels for this purpose, but they are largely going out of use as food for men. Prices have ruled low.

Hake.—But few are caught here. Georges Bay and the waters near Prince Edward Island seem to be the home of the hake in the eastern end of Nova Scotia. It would be interesting to know what success would follow the use of the English beam or otter trawl on the smooth level bottom of those waters. If it succeeded it would be a solution of the bait question, which is so perplexing to the fishermen of those parts, and might ensure a much larger catch of a fish which is growing in the estimation of consumers and dealers every year. It would also solve the dog-fish problem.

Lobsters.—The catch of lobsters on the coast was smaller than that of the previous year. This was due to the heavy gales which prevailed in June, breaking up the fishermen's gear and almost completely stopping business. Some who fished through the greater part of July found lobsters plentiful and made it the best month of the season. The tendency of prices has been upward, and in this way the fishermen have been partly compensated for their short catch.

There seems to be a multitude of opinions as to the best measures for the regulation of this business and the preservation of the lobster from extinction. We believe the present law as to the close season is probably as near the right thing as can be got, and should be strictly enforced. At present it is not enforced, and much

illicit packing is reported. We think it is unwise to make any regulation as to the length of lobster to be caught, for the simple reason that it is not and cannot be enforced. Such a law had better be repealed. The same remark applies to berried lobsters.

Squid.—There has been a scarcity of squid on this coast this year. This scarcity may only be temporary or it may be the beginning of a period of scarcity for these valuable bait fishes such as existed some years ago.

The most of salt fish have ruled low in price this year, salt mackerel being the exception. The low prices coupled with a scarcity on the inshore grounds has made 1897 a poor fishing season for the most of those engaged in the business.

DIGBY.

Codfish were not reported this season until 11th May, when for a few days fair catches were made. After this they became scarce, and with the exception of some fair fishing about the middle of June, the catches were light but regular the whole season. During August and September dog-fish were very troublesome and are reported to be more numerous each year and to remain longer in the bay. Towards the end of the season scarcity of bait and bad weather interfered with fishing. Total catch estimated at 5,969 lbs.

Haddock.—With the exception of some fair catches about the middle of June, they were scarce from 6th May to 9th September, when they somewhat improved, and fair catches were made until the close of the season. Total catch said to be about 10,090 lbs.

Hake appeared 14th May and the catch has been a uniformly good one. Total estimated at 18,520 lbs.

Halibut appeared in fair quantities on 6th May, but the catch has been poor, being estimated at 3,180 lbs.

Herring.—This district once famed for the "Digby chicken" which was such a source of large profit and a valuable industry is rapidly passing into obscurity as far as its herring fishery is concerned. Several reasons are assigned for this deterioration:—

1st. Because the coast line is fouled by the putrid bait of lobster traps which keep the herring from striking in to spawn or feed.

2nd. Drifting for them for bait with oil torches.

3rd, and perhaps the most destructive cause, is allowing so many millions to be taken for the sardine factories. All these causes have nearly destroyed the fish in these waters, or have kept them off so many years, that they have found other feeding and spawning grounds; and as a consequence fishermen of this district are compelled to seek and purchase bait on the north shore or elsewhere at loss of time and much expense. Total catch is estimated at 236 brls.

The following paragraph which appeared in the *Halifax Herald* of 16th November relative to bait in this section, is well worthy of some notice:

"The steamer 'Wesport' has finished her regular sailings between St. Mary's ports and Weymouth. The past season the Insular Steamship Company, owners of the 'Westport,' put the boat on the route from 'Wesport' to St. John, a weekly service. This has been a great convenience, not only to the travelling public and dealers of Long and Briar Island, but to the fishermen. Heretofore vessels coming in Saturday night with their week's catch of fish, were unable to get back to the fishing grounds for a week or ten days on account of having to go up the Bay of Fundy for bait. When the steamer was put on the St. John route she would bring twenty and thirty barrels of fresh bait on Saturday and the whole fleet of vessels would be baited up, and back to the fishing grounds on Monday, thus enabling the fishermen to make a better season's catch, and by so doing, a large amount of money exchanged hands, and all enjoyed a good share of prosperity. A subsidy has been asked from the Dominion Government for this route, and it is hoped that the amount will be granted the coming year."

Lobsters were first taken on 6th May in light catches but soon increased and until 29th June were taken in fair quantities, although the fishery was greatly broken by bad weather. The total catch the past season is estimated at 336 brls. in comparison with 1,247 brls. in 1896. It is reported that if lobsters are taken during the winter and spring months, as formerly, it is feared that next season's catch will be a failure. The winter fishing is held by many to be the chief cause in killing off the supply—taking female lobsters at any time and also those under 10 inches. All fishermen and packers agree that in order to save this valuable fishery from total destruction, new regulations as to size and times of catching should be made.

HALIFAX.

Mackerel were reported in large schools off the harbour on 4th October and catches varying from 40 to 200 barrels, were made. Although portions of the schools struck in the various coves about the harbour, still the main body are reported to have kept well outside. The fish were pronounced No. 1.

Lobster.—During the past season the following quantities of lobsters were exported to the United States from this port:—

March quarter 1897, 1180 brls., valued at	\$ 8,426
June " " 4485 " " 	38,489
Sept. " " 383 " " 	8,203
<hr/> Total	<hr/> 6048
	\$55,118

ISAAC'S HARBOUR.

Codfish were first reported in fair quantities on 14th June but the catches throughout the greater part of the season were light. During October very good fishing was reported. Season's catch considered an average one.

Haddock and Halibut.—Only few taken during the season.

Herring were taken in light catches first on 12th May and the catch throughout the season is considered very fair: there having been about 3000 bbls. taken between New Harbour and Beckerton.

Lobsters were first reported on 5th May in small quantities; but bad weather prevailing the catches remained light throughout the month. In the early part of the season fishermen experienced great loss of traps which to an extent accounts for the very light catch.

Mackerel were first taken on 8th June but it is reported that only a few barrels were taken during the season.

LIVERPOOL.

Alewives were taken in light and fairly regular catches from 3rd May to 4th June.

Codfish were first reported on 15th May, but the catches, with few exceptions, were light until 8th September when they improved, and the average catch was fair until 15th October. In the latter part of May and former part of June good fishing was reported on off-shore grounds, but later in the season bait was scarce and was the chief cause of poor catches.

Haddock although first reported on 18th June were not taken regularly until 22nd July, from which date the catches were light until about 8th September, after which the average catch was fair until the season closed.

Herring.—On 15th May off-shore crafts reported herring striking and the average catch per vessel was about $\frac{1}{2}$ barrel.

On 22nd May and 4th June good quantities were reported on off-shore grounds, but none were taken inshore until about 16th August from which date the catches varied from $\frac{1}{2}$ barrel to 5 barrels per boat until 15th October.

Lobsters were first reported on 3rd May and with the exception of fair catches from the 12th to 15th May inclusive, the catches were light until fishing closed about 28th June. About 28th May and 11th June a great many traps were destroyed on account of the heavy seas.

Mackerel were first reported on 20th May when an American seiner is reported to have taken 14 barrels large mackerel off here. No catches were made by local boats until about 11th June when one boat was reported to have taken 20 mediums. They were not afterwards reported until 14th August from which date the catches were light and irregular until 15th October.

Squid were very scarce this season, there having been but light catches made throughout July.

LOCKEPORT.

Codfish were first reported in good quantities on 10th May, and although the weather was bad, one boat got 11 quintals. During the remainder of the month the weather continued very rough, and best boats only varied from 12 to 72 qtls., although herring bait was plentiful on ground. Throughout June the weather was pretty much as in May, and fish were reported plentiful on grounds, but the weather was unfavourable. On 11th June a severe storm did much to injure this fishery, and during the remainder of the month the catches were light and bait scarce. On 29th June dog-fish appeared, but were not reported to have given much trouble. On 3rd July, as squid were plentiful on the grounds, cod somewhat improved, and the catches throughout that month were on an average fair, and bankers were reported doing well. During the remainder of the season the inshore fishery was poor and bait scarce, but from 12th August to 24th September, fair fishing was found on off-shore grounds, and about former date were reported plentiful on Middle Bank. Total season's catch is somewhat below that of 1896. In addition to the total catch, it is reported that 400 casks, or 14 000 gallons cod oil were extracted.

Clams.—During the past season 1,130 barrels were taken for bait.

Haddock, although not reported, appear to have been taken in light quantities, as will be seen in the statement.

Hake was also not reported, but the total catch, as per statement, shows a very large increase.

Halibut.—From 17th May to 25th July, light but irregular catches were reported, and the total catch is estimated at 3,000 pounds.

Herring, although reported plentiful on grounds from 17th May, were not taken inshore until about 5th August, when light catches were made at Green Harbour; and until the end of the month varied from an average of 40 fish to one barrel per net. From 1st to 17th September, the catches remained light, but on the 18th they greatly increased, and for a few days some excellent catches were reported. From 21st September until 11th October, they were rather scarce, except at Green Harbour, where they were reported plentiful on 6th October. On 11th October herring were noticed in abundance in the harbour, and very large catches were expected. The total catch, outside of the quantities used for bait and home consumption, is estimated at 3,000 barrels, or 600,000 pounds, which is an increase over last year's catch by 1 000 barrels.

Lobsters.—With the exception of some good catches during the second and last weeks of May, the catches were poor throughout the season. About the last of May fishermen suffered the loss of many traps.

Number of live lobsters taken for export. 131 660.

“ “ canned, 1,100 cases, or 52,800 pounds.

Mackerel, although reported schooling at headlands near this station on May 29th, were not taken until 17th June, when 50 were captured by net. Nothing was afterwards heard of them until 10th September, when they appeared in fair quantities at West Head. During the first week of October light catches were made at Raen Island. Total catch estimated at 3 barrels, or 600 pounds.

CATCH OF FISH AT LOCKEPORT STATION FOR 1897.

	Lbs.		Lbs.
Total quantities of fish by 6 vessels....	3,194,150	Proportion Cod.....	4,291,872
do 18 do	689,200	do Haddock.....	65,923
Boats from Port Hebert to the Blue Island	511,550	do Hake.....	31,711
		do Pollock.....	4,394
Total.....	4,394,900	Total.....	4,394,900

LUNENBURG.

Codfish were taken in fair catches from 22nd May to 1st June, but from that date the fishery has been poor, owing principally to the scarcity of bait, and the shore catch is said to have been the poorest for years. Fishing for the season on shore soundings, Quero and Grand Banks and North Bay was good; Middle Bank and the western part of the Labrador very good, while on Western Bank it was poor. On the whole the season's catch is above the average. Appended are lists of the banking fleets of this district, together with their respective catches.

Haddock were taken in good quantities from 24th June to 1st July when boats averaged 2 qtls., but since that date the catches have been poor, owing to the scarcity of bait, and the total catch is reported below the average.

Herring.—The first bank herring were taken this season on 21st May from which date they were good until the 26th. Since latter date there were not over 5 barrels caught and the season's catch is considered the poorest ever known.

Lobster fishing commenced 1st January and closed 30th June. Those caught in January, February, March and April were shipped alive to the United States, and although prices were good, the season's catch has been poor.

Mackerel were first taken on 21st May from which date boats averaged 50 large fish daily until the 31st. From June 4th to 10th the average was 25 medium fish, while throughout October the boats only caught a few dozen. Total season's catch considered the poorest for years.

Salmon.—On 21st May, it was reported through the columns of the *Halifax Chronicle* that very few salmon had been taken in the La Have River this season but that several had been caught at Cherryfield.

Squid have been scarce on shore this season and also on Quero and the Grand Banks. None were taken on Middle Bank.

Dog-fish.—It is reported that this destructive fish is getting more numerous each year and keeping other fish away, and it is suggested that Government allow the fishermen a bounty to catch them as they are of no value.

LUNENBURG BANKING FLEET.

Port.	Number of Vessels.	Catch.
		Qtls.
Lunenburg.....	59	93,150
do North Bay.....	5	4,900
do Labrador.....	4	5,400
La Have.....	38	66,785
do North Bay.....	10	9,100
do Labrador.....	13	11,700
Mahone Bay.....	9	14,900
do Labrador.....	9	5,565
Total.....	147	211,500

MUSQUODOBOIT HARBOUR.

Alewives were taken in small quantities from 31st May to 4th June. Total catch about $\frac{7}{8}$ short of last season's.

Coufish were first reported on 27th May, and the catches were light until 29th June, when they somewhat improved and the average catch until 5th August, was

fairly good. During the remainder of the season the catches were irregular but varied from fair to poor. The total season's catch by inshore boats in this district, comprising all sections between Dartmouth and Tangier, will be about 50 per cent of last year's catch. Vessels from this port which went to North Bay brought back fair catches.

Haddock struck in on 5th July, and the catches were almost identical with cod. Total catch about $\frac{5}{8}$ of last season's catch.

Herring first appeared on 16th June and have been unusually scarce the whole season; scarcely enough having been taken for bait. The fall catch to 1st November will be about 25 per cent of 1896.

Lobsters throughout April and May were somewhat plentiful, and the prospects were very encouraging; but the continued rough weather greatly interfered, although they were in fair quantities on the ground, throughout June and particularly so between Chezzetcook and Clam Harbour during the second week of May. On the whole the pack will nearly equal that of 1896.

Mackerel have been nearly a total failure. Estimated catch not over 20 barrels.

Salmon have been very scarce the past season; not over 35 taken at this station.

PORT LA TOUR.

Herring appeared, as usual, on 3rd May in fair quantities, but bad weather setting in no catches worthy of note were made until the 11th from which light and regular catches were made until 15th June. On 10th May they were reported plentiful at Mill Stream (Barrington). Nothing afterwards reported.

Codfish.—During the first nineteen days of May the weather was too rough for this fishery and more attention was given the lobster fishery. On the 20th the first catch was reported, the average catch being 1 quintal per man. From the 23rd to 29th, fair catches were reported, although the weather was unfavourable, and from 30th until 3rd June, very good catches were made inshore. From latter date until the 28th the average catch was 1 quintal per man; but after this the catches, although fairly regular were light, owing to scarcity of bait, bad weather and prevalence of dog-fish. During the second week of September, codfish were reported plentiful wide offshore. It is estimated that the total catch will be about 20 per cent less than last year's or about 1,600 quintals.

A noticeable fact mentioned by fishermen this year is that the usual school of large cod does not appear to follow the herring; and since the herring struck this fall there has been very little improvement in the catch of cod.

Haddock were not reported this year until 2nd July, from which date the catches were light until 25th September. They were very irregular throughout September, and it is reported that none were taken on trawls as formerly. Total catch estimated at 300 quintals.

Herring did not appear the past season until 13th August, when the best netter was reported with 30 small fish. From the 18th to 26th inclusive, small catches were made, but on the 31st they were reported schooling in the harbour, but were reported plentiful about 20 miles to the westward, and nets averaged about one barrel. From 25th September to 15th October the catches varied from 45 herring to $1\frac{1}{2}$ barrel, and on latter date large catches were made but more particularly in the adjoining harbour of Cape Negro. It is said that the total catch to 15th October was 1,500 barrels, 500 of which will be reserved for lobster bait.

Lobsters were first reported on 3rd May, and light and regular catches were made until 29th June, although on 8th June many traps were reported broken. On the whole the total quantity taken this year was larger than in 1896 and the prices were well sustained during the season.

Mackerel appeared to avoid this part of the coast this season, and none of any account were taken in this county eastward of Cape Sable.

Squid did not appear this season, but were reported to have passed over the ground about the first week of July.

PORT MEDWAY.

Alewives were taken in catches varying from fair to poor from 4th May to 26th, and the total catch is considered a failure.

Codfish were first reported on 7th June, and the average catch throughout the season has been good. About 17th July they were reported to be very changeable, as one day they would be close inshore and the next a long distance off shore.

Haddock although first reported on 13th May, were not regularly taken until 22nd June, from which date very good fishing was reported until the last of the month. During the remainder of the season the catches were identical with cod.

Herring were not reported until 9th September, when very good catches were made until the 21st. Very few afterwards reported.

Lobsters were reported in light quantities on 3rd May, and although the sea was rough for this fishery the average catch, until operations closed on 29th June, was fair.

Mackerel were reported schooling at Broad Cove on 18th June, but no catches were made until the 24th, when light hauls were made for a few days. Nothing afterwards reported until 4th October, when they were again schooling, but no catches worthy of note were reported.

Salmon were taken in fair quantities on 3rd May, and the average catch until 19th June was fair.

Shad were taken in light but regular catches from 5th May to 14th, inclusive.

PUBNICO.

Codfish were first reported on 2nd June, and the catches until 26th August varied from good to fair although bait was reported very scarce all through this period. From 26th August until 13th September the catches were somewhat poorer; but on latter date fishermen were reported to have all hauled up for the season and the total catch is considered an average one.

Haddock catch considered an average one.

Herring, although taken in light catches during the former part of August at Mud Island, were not reported here until 14th September when they appeared plentiful outside but were scarce inshore. On 24th September the first catch inshore was reported, and until 15th October the catches varied from 3 to 4 barrels per boat. During the second week of October they were reported plentiful at John's Island.

Lobsters were taken in fair quantities from 10th May until 10th June, but afterwards were scarce until the season closed. Total catch reported slightly below last year's.

Mackerel were taken in small quantities by nets on 19th May, but on the 21st the trap at the point had 400, and during the following few days some fairly good catches were made. Light catches were afterwards made only to the 22nd July after which none were reported. Total catch considered very poor.

SALMON RIVER.

It is reported that owing to the blustry weather the season did not open as easily as usual; consequently the catches are smaller than any previous year.

Alewives were only taken in very small quantities, as the refuse of the Dufferin Mines crusher was reported to have been dumped in the river thus polluting the water and causing the fish to forsake their old haunts. Total catch about 5 barrels.

Codfish were first reported on 14th June, and although the fishery is not prosecuted to any extent, owing to the fishermen not having sufficiently large boats to venture far from land, small boats found this fish in fair quantities from 1st July to 15th November. Total catch estimated at 100 quintals.

Haddock appeared about 13th August in very good numbers, and although they remained in fairly large quantities the low prices which prevailed did not encourage fishermen to catch many.

Herring were first reported on 5th June but the fishery has been very poor; total catch not exceeding 30 barrels.

Lobsters were first reported on 4th May in small quantities, but bad weather continued throughout the month which prevented the hauling of traps. On 31st May and 24th June a large number of traps were destroyed by heavy seas which left the fishermen with limited means of prosecuting this branch. It is reported that the total catch of the 5 factories in this district was about 3,000 cases; while a large number were shipped to Boston during the season.

Mackerel were first taken on 19th August, but the catch has been very light and will not exceed 3 barrels.

Squid were scarce in former part of season when looked for, but are now (16th Nov.) fairly plentiful, when there is no demand at this late season.

SAND POINT.

Alewives were taken in light quantities from 4th to 6th May, but although on the 7th they became plentiful, the catches continued light owing to the heavy seas running. From 10th June to 5th July the catches varied from fair to good and the season's catch is a good average.

Codfishing commenced about 4th May, but the bad weather prevented good fishing and only light hauls were made, although they were in fair supply off shore. About May 25th this branch became good off shore and the average catch per day was about $1\frac{1}{4}$ quintal per man. This continued until about 21st June as herring bait was in good supply on the grounds. After latter date bait became scarce, and dog-fish plentiful, and notwithstanding that the fish were plentiful on the grounds, the catches were light for the remainder of the season. On 31st July, Captain Thorbourn of schooner "Eva L. H." reported dog-fish plentiful all over Quero Bank—something which had not been hitherto known on that ground. On 16th October a good school of cod was reported on shore, but as herring were then plentiful more attention was given that fishery. In comparison with last season's catch there will be a large decrease, which is almost wholly attributable to the scarcity of bait. The Bank Quero vessels with hand lines and salt clam bait landed each two full fares. The price of these fish being low, the net proceeds to the owners of vessels and crew is far below that of the past several years.

Haddock were not reported until 1st June from which date the catches were light until July 5th. From latter date until the 27th average catch was good, but during the remainder of the season the catches with very few exceptions, were light. On 6th August they appeared fairly plentiful inshore, but as they did not fish well with hand lines, the bait proved too scarce to trawl them, and on the 14th the catch was estimated at $\frac{1}{3}$ less than the previous year's. About 27th September United States bankers reported cod and haddock to have been in good supply all season on eastern part of La Have Bank.

Hake have been very scarce on shore soundings this year.

Herring were reported plentiful 2 miles off shore on 18th May and varied from good to fair until the end of June. Nothing was reported from this time until 26th August, when they again appeared plentiful off shore and were of large size. During this period but very few were taken inshore. On 25th September one boat was reported with 100 herring, and during the following two weeks the catches of best boats were from 6 to 8 barrels. About 14th October some boats were reported with 18 barrels, and during the next few days they became very plentiful—some boats taking 20 barrels a morning and making 3 trips. Fishermen were compelled to sink their nets to catch the herring, otherwise more mackerel would have been taken. It is estimated that since this fish struck about 3,000 barrels have been caught to 15th October and were then in good quantities. The first were of large size but not fat.

Lobster fishery commenced 1st February, but with the exception of some fair catches having been made at headlands from 10th to 21st May, the catches were poor the whole season. On 13th May it was reported that this fish had so fallen off that the Portland Packing Co. was obliged to close. It is felt that unless fishermen

are restricted from catching any lobster under $10\frac{1}{2}$ inches that within a few years this valuable branch will be a thing of the past. This year's catch estimated about half of that of 1896.

Mackerel were not reported the past season until 15th August from which date light catches were made until 15th September and only those who had large mesh nets obtained any. During the first 10 days of October some fair catches of very large fish were made, some of which were locally consumed and the balance salted for market; none having been used for bait. It is estimated that the total catch was about 20 barrels.

Salmon, although not reported, are said to have been fairly plentiful the past season.

Squid appeared in small quantities on 21st June and the catches continued light until 6th July when they became more plentiful inshore but were very good at Shelburne Lighthouse, although of small size. Fair supplies were taken until the 17th, when dog-fish drove them away, and for the remainder of the season they were very scarce.

SPRY BAY.

Codfish were first reported in fair quantities on 8th June, but the catches were light until about 30th August, when for about 10 days the average catch was good. During the remainder of the season the fishery was poor. Total catch about 500 quintals.

Haddock were only reported in September, throughout which month the average was only poor. Total season's catch about 100 quintals.

Herring struck first about 3rd May, but very few were taken until September, when light catches were regularly made until 9th October. The total catch is estimated at 300 barrels, but it is reported that the greater portion of this quantity was taken off Pope's Harbour.

Lobsters appear to have been a poor catch, as only light catches were reported from 17th May to 23rd June.

Mackerel were only reported in October, when light catches were made from the 5th to 9th inclusive. It is said that they passed in deep water as they escaped the nets entirely. No traps or seines used here. Total catch estimated about 20 barrels.

WHITEHEAD.

Alewives were only taken in light quantities from 27th May to end of month, and the total season's catch is estimated at 4,500 pounds.

Codfish were first reported on 15th May, when one boat obtained $\frac{1}{2}$ quintal. With the exception of an occasional fair catch, they continued scarce the whole season. Total catch 150,000 pounds.

Haddock appeared slightly earlier the past season, and from 24th May until 10th June, the average catch was fair; 30 quintals having been taken in a trap on the 9th. During the remainder of June the catches were light. Nothing was reported throughout July, but light supplies were taken somewhat irregularly during August and September. Total catch estimated at 180,000 pounds.

Hake were very scarce during the season and but few catches were reported.

Herring were taken in light quantities from May 15th until 18th August, when catches became better, and fair average catches were made until 7th September, after which they were scarce until the season closed. It is estimated that the total catch will be about 350,000 pounds.

Lobsters were taken as soon as the ice left on May 16th, but the catches continued poor during the whole season. Estimated catch about 3,000 cases, which is a shortage of 1,400 cases in comparison with 1896.

Mackerel appeared on 20th May, but few were taken until 1st June, when two barrels were taken in a trap: and for the next two weeks the catches remained

poor. On the 17th, 1,000 fish were taken in a trap and boats averaged 40 fish. About the 23rd, 20 barrels were taken by trap, and although netting was dull, boats averaged 1 barrel. None were afterwards reported. Total catch about 20,000 pounds.

Salmon although not reported, is said to have aggregated 3,000 pounds.

Squid as far as reported, were only taken in light supplies during the first week of August.

YARMOUTH.

Alewives were first reported on 4th May, and the catches until 16th June varied from good to fair.

Codfish, when reported first on 4th May, were in fair quantities, and the average catch until the 22nd was fair. About the last of the month large quantities were reported to have been taken, and although reported irregularly during the former part of June, the average was fair. On 25th June, the inshore fishery was very poor, while the off shore was good. About 20th July, it was reported that scarcely sufficient cod and haddock were taken the past fortnight for local use; while throughout August the catches were very light owing to prevalence of dog-fish and scarcity of bait. On 2nd August Brown Bank fishermen reported good fishing, but no bait. From 1st to 13th September, the catches of cod and haddock were very fair, but for the remainder of the season were light.

Haddock were almost identical with cod, except that the catches throughout May were light.

Halibut were on an average good from 4th to 28th May, but during the remainder of the season were, as far as reported, scarce.

Herring.—Although a small catch was reported on 3rd July, nothing of consequence was taken until 3rd August, when nets at Yarmouth Bar took 9 barrels small herring. From latter date until the 31st, light catches were made each day, when a good school was reported and good supplies of bait were obtained by nets and floating traps. During the remainder of the season very few were taken.

Lobsters were first reported in good quantities on 4th May, and although no large catches were made, the average catch was very fair. During the past season the following quantities of live and canned lobsters have been shipped to the United States from this port:—

	No of crates of live lobsters.	Value.
January	2,678	\$22,917
February	2,096	28,191
March.	2,999	43,293
April	4,052	41,038
May	7,832	66,932
June	3,281	34,284
Total	22,938	\$236,655

After careful inquiry, this quantity has been subdivided into the following number of crates and credited to counties as follows:—

	Crates.
Yarmouth County.....	11,438
Shelburne ".....	9,000
Digby ".....	2,500
Total.....	22,938

It is reported that in addition to these quantities, United States and local vessels smacked additional lots from the counties of Shelburne and Digby.

The following are the shipments of canned of 1897 pack :—

Factory Name.	No. of Cases.	Value.
Mud Island Lobster Company.....	950	\$ 7,600
Pubnico "	2,350	18,800
Cape Sable Packing Company	1,600	12,890
Cape Fourchu "	1,200	9,600
Harry's Island "	1,100	8,800
Total.....	7,200	\$57,600

The above factories are controlled or owned in Yarmouth, and the quantities and values are as correct as is possible to get them.

Mackerel were first taken on 10th May, when the County line trap was reported to have taken 45 large fish. During the remainder of the month, the various traps in this section varied from one dozen to 150 barrels. On 19th May the first mackerel were taken by nets; but few were afterwards taken, as the easterly winds towards the last of the month drove the fish off shore. After this but few were taken, and on 3rd July the traps were reported to have been taken up. On 20th July and 31st August they were reported schooling here and at the mouth of Tusket River respectively, but no catches were reported.

Salmon and Shad catch was a fair average during the month of May, but for the remainder of the season was light.

CAPE BRETON.

WEST BRICHAT.

Alsewives.—This fishery is fast becoming a thing of the past. This season's catch was the poorest ever experienced on these shores.

Codfish appeared about 15th May, but the average catch during this month was only light. Small catches were made pretty regularly during June and July; but the best fishing was made during the latter part of August. Little or no fishing was done in September, partly owing to the scarcity of bait, but chiefly to the rough weather which prevailed during this month, and sometimes prevented boats from going out for three or four days in succession. The fish however, were always reported scarce. This season's catch of cod is a light one, and may be estimated at about one quarter less than last year. The fish were of a fine quality all through the season, and as the weather was favourable for drying them they have been cured very hard.

Hadlock struck in fairly plentiful about 24th May and fair catches were pretty regularly made during the first week in June. In July light catches were made daily; but after this month they remained scarce until the close of the season. The total catch, though a light one, compares favourably with late years.

Herring.—Small catches of herring were made during the latter parts of May and June, but the fish did not remain on the coast any length of time. They again struck in about 20th July, from then until the last of August some good hauls were occasionally made. The fish kept well in-shore this season, and did not draw off into deep water until about 15th August, when good hauls were made on Bradley Bank and around the Severn Rock. No herring were taken here in September, but good fishing was reported at Cape Auger about the 25th and at Red Head (Straits shore) during the latter part of the month. The catch this season was from 25 to 40 barrels per boat, which is considered fairly good. The fish taken in this bay are usually of a fine quality, although some difficulty is experienced in curing

those caught about the first of August, as they are apt to turn out soft backed and tainted, unless great care is taken with them. About this season (October) the fish are very fat in the back, which is of a soft nature, and should they be allowed to remain any length of time in a heap or exposed to the sun they quickly become heated. To avoid this it is necessary that they should be cleaned as soon after coming out of the nets as possible, and strong pickle poured over them immediately after salting. However, many of our fishermen maintain that even this mode of curing will not preserve them; but insist that some of the fish are diseased in the water, and consequently no amount of care in curing can save them.

Lobster fishing commenced 19th April, and fair catches were made up to 20th May; but from that date out the fishing was poor. Though the catch was somewhat better this season than last, yet it cannot be called a good one. About the same number of men and boys were employed in this branch as usual. The fish are now caught further out in the bay and in deeper water.

Mackerel fishery was again a failure; not even a dozen barrels were taken among all the fishermen.

On the whole the fisheries here were poor this season. There are a few of the most energetic men who have done fairly well; but there are many others who have barely caught enough fish to maintain themselves and families during the summer. It would have been far better for some of them had they sought other employment at even 50c. per day than waste the fine summer months chasing a few fish in the bay. Like many another industry, the fisheries here are overcrowded.

CHETICAMP.

Codfish were not reported until 12th May owing to the easterly winds which prevailed during the former part of the month. From above date until about 4th June the catches were light, but improved somewhat afterwards, and fairly good catches were made at Mainland and Point for about a week. The catches from 10th June to 6th July were light, and are attributed to the salt clam bait which is inferior. From 6th July to 10th August the catches were on an average fair, although they were very good from 27th July to 3rd August, when boats averaged 1,000 pounds of good sized fish. About the 15th this fishery declined, as is usually the case for a couple of months; and with the exception of a few good catches, remained poor until the last of September. During the former part of October the catches were very fair, but would have been much better had good bait been obtainable. It is a noticeable fact that during the past few years nearly all the marketable fish have been found in very deep water—from 12 to 15 miles off shore; and thus it is that the catches have been so light for the boats, although provided with good tackle, are too small to venture so far from land.

Haddock were first reported on 19th July, and the catches throughout the season were, on an average, fairly good. Like codfish they were found more plentiful in deep water from 3 to 15 miles off shore.

Hake appeared 16th July, but with the exception of fair catches during the first week of August, they were scarce the whole season.

Herring were not reported until 9th July, although four vessels arrived from the Magdalen Islands about 22nd May laden with this fish for bait and home use. The only catches reported were from 9th July to 22nd, which were light.

Lobsters were first taken this year on 12th May, but only varied from fair to poor throughout the season.

Mackerel reported in small quantities on 5th August, and on the following day were taking hooks freely in Pleasant Bay. The catch during the rest of the month was light, especially from the 8th to 18th, when bad weather prevailed. About the 23rd some good hauls were made in Pleasant Bay; and one Cape Rouge boat had 100 fish. About this time fishermen gave this fishing greater attention as the prices were very large. Throughout September the average catch was fair; although prevalence of dog-fish, heavy currents and unfavourable weather greatly

impeded this fishery. Very few mackerel were taken up to the 15th October, although they were reported schooling in good numbers on the 8th, but would not bite. Large schools were again reported between Margaree Island and Pleasant Bay on 16th October. The light catch is mostly attributable to the inferior quality of bait used, as most men use the thin spring herring, while those who obtained good bait are reported to have done well.

Salmon were first reported in good numbers in Pleasant Bay on 5th July and 6th, but no catches were made here until the 9th, from which date they were very scarce until the close of the month.

Squid struck in light quantities on 13th July and were on an average fair throughout the season. Some excellent catches were made, however, during the last week of July.

As Cheticamp includes the fishing stations of Eastern Harbour, Cheticamp Point, Cape Rouge and Pleasant Bay, the following approximate quantities of fish taken at these stations may be of interest and value:—

Eastern Harbour.

Codfish.....	5,850 qtls.	Mackerel.....	356 brls.
Herring.....	1,000 brls.	Lobsters.....	33,744 lbs.

Cheticamp Point.

Codfish.....	1,500 qtls.	Mackerel.....	170 brls.
Herring.....	100 brls.	Lobsters.....	16,752 lbs.

Cape Rouge.

Codfish.....	10 qtls.	Lobsters.....	10,008 lbs.
Mackerel.....	80 brls.		

Pleasant Bay.

Codfish.....	30 qtls.	Lobsters.....	16,800 lbs.
Mackerel.....	250 brls.		

Summing up the production for the past season, of the different stations of this district, it would give a total of—

Codfish.....	7,390 qtls.
Herring.....	1,100 brls.
Mackerel.....	856 "
Lobsters.....	77,304 lbs.

D'ESCOUSSE.

Codfish were not reported this year until 9th June from which date the catches were poor throughout the season. Total catch by small boats about 100 quintals. Of the 5 vessels which usually fish in North Bay, the average catch this season has been about 900 quintals which is a better average than in 1896.

Hake, although reported in the second week of May, were not regularly taken until 16th June; the catches thereafter having been light and the total catch not amounting to more than 75 quintals.

Herring fishery commenced 11th May and light catches were pretty regularly made until 24th June when they greatly improved, and during the following 3 weeks the catches varied from good to fair—boats carrying from 2 to 3 barrels daily. During the remainder of the season the catches were, with few exceptions, light. Total catch estimated at 300 barrels.

Lobsters were first reported in good quantities on 7th May, and very fair catches were made each day throughout the month. During the first ten days of June the catches were light, owing to heavy seas. Although lobsters became more plentiful, the bad weather continued, and on the 12th it was reported that hundreds of traps had been driven on shore and broken. On the 21st the heaviest storm experienced in the past 20 years destroyed fully 1,000 traps, and thus practically crippled this fishery. Again on the 30th hundreds of traps were destroyed; still fair catches were made whenever weather permitted. During the remainder of the season the catches were on the whole light. Total catch estimated at about 25,000 fish.

Mackerel were taken in light catches by nets on 25th May, and with few exceptions were scarce the whole season. Catch of shore boats estimated at about 50 barrels, while the 5 vessels aggregated about 125 barrels which were disposed of at \$14.10 per barrel.

GABARUS.

Colfish were taken on 5th June in light quantities and continued so, with few exceptions, until about 24th August. Throughout September the catches varied from 700 lbs. downwards, but bait was very scarce and weather very blustry. Very good fishing was reported during the early part of October, although bait continued very scarce, and the prospects were more encouraging. It is estimated that the catch to 15th October, was 1,225 quintals.

Haddock were taken in light catches from the 12th to 16th July, inclusive, but nothing was afterwards reported.

Hake.—Not reported this season.

Herring struck about 7th June but the catches were only light until the last of July, although they were close inshore about 16th July. During the first two weeks of August catches varying from 300 to 3,000 fish, of large size, were made daily. On the 16th they were schooling close inshore, and although 40 barrels were taken in one seine they had to be left untouched as salt was very scarce. This fishery was given the entire attention of all fishermen until bad weather set in about 4th September and prevented boats from going out. Season's catch about 1,150 barrels.

Lobsters.—Notwithstanding that heavy ice was close inshore 2,900 fish were taken on the 7th May, and some very good catches were made until the 13th. After this, although fish were in good numbers, and good supplies of bait were obtainable, the ice prevented the setting of cages. With the exception of fair catches each day from 5th to 12th June they were reported scarce for the remainder of season. Season's catch considered very poor.

Mackerel were first taken on 26th May, and on the following three days the catches aggregated 52½ barrels per day. Beyond a few light, irregular catches made during the first 2 weeks of June, they were not afterwards reported. Total catch estimated at 210 barrels.

HAWKESBURY.

Alewives were reported in good quantities at River Inhabitants from 24th May to 27th inclusive; and from 29th May to about 9th June were taken in fair supplies at Port Malcom.

Cod and Herring fisheries are said to have been almost a complete failure. Very few herring were taken this year at Port Malcom.

Lobster fishermen did fairly well and realized fair prices for their fish. Had it not been for the fair results of this fishery, fishermen would have been in desperate circumstances.

Mackerel fishing has been almost a complete failure, and none were taken at Port Malcom. Very few of the Magdalen Island fleet from this district caught fish enough to pay for their supplies and outfits.

INGONISH.

Codfish were first reported on 22nd May, but were scarce the whole season, and the catch is said not to be over $\frac{2}{3}$ of an average one. This shortage, together with low prices obtained, leave those employed in this branch in very straightened circumstances.

Herring first appeared 27th May but this fishery too proved almost a failure. No summer fish were taken.

Lobsters were first taken on 22nd May but this branch has been overdone. Additional factories and gear caused the grounds to be overfished the past two seasons and therefore neither packer nor fishermen can make it pay. Three severe storms during the season destroyed so many traps and cages that this branch is reported away below an average catch.

Mackerel were not reported this year until 2nd June and the catches throughout the season were light and irregular.

Salmon were first reported on 9th June but although some very good catches were made in adjacent localities, the catches here were light and irregular. On the whole the catch has been an average one.

Squid appeared plentifully on 9th June and some excellent supplies were taken for a few days. After this they were only taken in small quantities until 27th August when they became more plentiful and good supplies were obtained each day until the season closed.

L'ARDOISE.

Codfish were first reported on 9th June and boats which had good gear did fairly well in deep water. The general catch, however, was light and the season's total catch very poor.

Haddock were reported, as usual, about 29th May but the catches have been very light during the season. In former years this fishery, was very remunerative as large catches were always obtained; but now boats scarcely obtain over 5 quintals each.

Herring were first reported on 11th June but scarcely sufficient taken for home consumption.

Lobsters were reported scarce on 1st May and remained so, although taken regularly, until 14th June when fair catches were made each day for a week. After this they were scarce until the extension granted had expired. Only three factories have been in operation the past season and the catch is said to about equal that of 1896.

Mackerel appeared earlier than usual last spring, the first catch having been made on 22nd May. Those who had nets set did well; but the season was short, none have been reported after June 18th.

For the past few years the inshore fisheries have been so poor that had not Scattarie and Lingan grounds supplemented the home catch, the result would have been very unsatisfactory. Fishermen of this vicinity are now beginning to realize that larger boats are necessary for the outside grounds, and as a result 3 or 4 small vessels are now on the stocks, and will be completed in time for next season's work.

LOUISBOURG.

Codfish.—This branch of fishing has been a complete failure; in the first part of season fish were scarce. During August and September good fishing was reported but a scarcity of bait prevented many being taken.

Herring.—A fairly good catch was made during latter part of June and the month of July; the fish being of large size and good quality.

Lobsters were first taken 6th May and continued fair until the 22nd, when a storm destroyed nearly all the pots, causing a loss of time in repairing and replacing. The extension of time granted was quite a boon to fishermen, as during that time good weather prevailed and good catches were made.

Mackerel were first taken 28th May and continued until the June 6th, when they suddenly disappeared. A few were hooked during August and September but not more than half an average catch during the season.

Salmon were first taken on 21st May and the catches have been light the whole season.

Squid were not reported until 1st October, from which date fair catches were made until the season closed.

MABOU.

Codfish.—The catch of all kinds of line fish is below that of 1896. In the early part of the season and up to August, very few of these fish were taken in this division. During the months of August and September, however, they were very plentiful, but owing to the scarcity of bait the catch was not as large as might be expected. Dog-fish were very numerous in September, and not only prevented other fish from taking the hook but also destroyed bait nets.

Hake and Haddock were unusually scarce all through the season; consequently the catch is below the average. Since about the 25th September boats and fishermen have been engaged on fine days ballasting the government pier at the entrance to this harbour; consequently no attention has been paid to the fishing industry.

Herring.—The spring herring fishery was fairly good, but the mid-summer and fall fishery show poor results.

Lobsters.—The catch of lobsters this season was somewhat in excess of that of 1896. Although there were only three canneries in operation in this division this season, compared with four last year, the returns show an increase of 69 cases over the total pack of 1896.

Mackerel have almost disappeared from these shores of late years. It is hard to account for the movements of these erratic fish. It is supposed, however, by fishermen that they keep out in deep water. The few that were taken this year were used for bait. The catch was even below the average. Very little attention is paid to this branch of the fishing industry of late years, so that fishermen are not disappointed with results this season.

Salmon catch was below the average. The only reason which can be assigned for the scarcity is that a large number of lobster traps were set in the immediate vicinity of the salmon nets and it is generally believed that the offal from the traps frighten or drive the salmon into deep water.

MARGAREE.

Alewives were almost a total failure.

Codfish and Haddock.—Scarcely any cod or haddock were caught until about 5th July when good catches were made for a few days, but afterwards continued scarce until about 24th August when they again struck on the coast and good catches were made for a few days and then slackened off. Total catch for the season has been poor, less one half of an average.

Herring and Mackerel.—The catch of herring and mackerel for the season has been almost a total failure. A few were taken about 12th July but after that time scarcely any were taken.

Lobsters were very good during the month of May and up to 10th June; but after that the catches began to lessen gradually until the close of the season. However, the total catch was an average one.

Salmon struck on the coast earlier than usual, but the catch was light until about 22nd June when fair catches for a few days were made. Afterwards only a few were taken, as the total was not over thirty per cent of an average year's catch.

Fishermen are of the opinion that there would probably have been some good catches of cod and mackerel during the latter part of the season but for the abundance of dog-fish.

MEAT COVE.

Codfish were first reported on 21st May, but as bait was very scarce, the catches were very light and irregular until about the 18th September. When the fish did appear in fairly good quantities, it was reported that no person was buying within 20 miles of this station, and the occasional one who did only offered 80 cents per 100 pounds, hence as there was no means of shipping, the quantity taken was only for home consumption and local use.

Herring appeared about 19th May, but as stormy weather prevailed the following month, the catches were consequently light. Nothing was afterwards reported, and no reason can be assigned for their non-appearance.

Lobster fishery commenced on 19th May, as bait was not obtainable previous to this date, and for the first few days the catches were light. On the 22nd they became more plentiful, and with the exception of an irregular, light catch during the third week of June, the catches were very fair; and had it not been for any unfavourable weather during the whole season, the catch would have been good. Season's catch, however, is reported to have been below the average.

Mackerel appeared on 28th May, but the catches were light throughout the season, although they were in good quantities all about this district. Although they would not take the hook in Bay St. Lawrence, owing to the great number of small fish on which they fed in preference to the prepared food of fishermen; the boats at Money Point and Poulet's Cove, on either side of Bay St. Lawrence, did very well. They were reported schooling at this station on 21st and 30th July and 25th September.

PETIT-DE-GRAT.

Alewives were scarce the past season and the total catch is estimated at 6 barrels.

Codfish were first reported on 13th May, and the catches throughout the season varied from fair to poor. During the first of the season strong tides interfered with the fishery, and in the latter part dog-fish were destructive. Season's catch about 500 quintals short of 1896.

Haddock fishery commenced on 10th May, and light catches were made regularly until the last of August. During the first 11 days of September the catches were fair, but nothing was afterwards reported. In comparison with 1896 there is an estimated decrease of about 300 quintals.

Hake.—This fishery has not been prosecuted the past season owing to the prevalence of dog-fish.

Herring made their first appearance on 12th May, but with the exception of a light catch on that date, they were not afterwards taken until 1st June, from which date light but regular catches were made until 26th July. From latter date until 23rd September, the catches were fair; but for the remainder of season were poor. In comparison with 1896 there has been an increase of about 600 barrels, most of which were caught in deep water—from 35 to 40 fathoms.

Lobsters were reported in fair quantities on April 12th, and the catches until the last of May varied from fair to poor. During the remainder of the season they were scarce; and as a great number of traps were destroyed by frequent gales, some fishermen gave up this branch and turned their attention to the cod fishery. It is estimated that 2,000 cases have been put up in addition to 500 crates which were exported alive to the United States.

Mackerel were first taken on 21st May,—1 boat having taken 40 fish—and during that week the average per boat was about 200. During the remainder of the season or until 8th August, the catches were light, and it is estimated that the total catch will not exceed 80 barrels. It is reported that about 120 boats fitted out for the fall fishery, but the aggregate catch will not exceed $\frac{1}{2}$ barrel.

Salmon were first reported on 1st June, and the catches until 17th July, when nets were reported to have been taken up, were fair. The quantity taken was sold fresh and realized \$400, which is about 25 per cent in advance of 1896.

Squid struck about 13th July and with the exception of some fair catches during the latter part of that month and first week of October, they were scarce and irregular.

PORT HOOD.

Codfish were taken in small quantities each day from 22nd May until 2nd June, after which the fishery was fairly good until the 22nd. From latter date until 9th August the catches were again light, but during the remainder of the season, when bait was obtainable and dog-fish not too destructive, the catches were fairly good.

Haddock and Hake were reported about 26th June and continued in fair quantities until about 20th September when, owing to the destructive dog-fish, these branches had to be abandoned.

Herring struck in on 5th May but only light catches were made here although some good hauls are reported to have been made at Little Judique about the 11th. The summer run was a complete failure, and the fall catch is said to be only a few barrels, but are of good quality.

Lobsters were first taken on 5th May and fair catches were regularly reported each day during the month. From 1st June, until the close of the season the catch was poor.

Mackerel appeared 29th June, from which date the catches were light, and at times irregular, until the last of August. Those taken in August were of large size; but nothing afterwards reported.

Squid were taken in catches varying from good to poor from 17th July until 14th August.

ST. ANN'S.

Codfish were taken in light but regular catches each day from 27th May to 31st July. On 28th May fair fishing was reported on the banks. Catch considered about 50 per cent short of last season.

Hake appeared in good quantities on 17th August, but afterwards were scarce until the season closed.

Herring.—As the bay was full of ice until about 11th May no catches were reported until the 12th, when this fish was found in fair quantities. From latter date until 2nd June the catch was good; but after this they began to slacken off and on the 6th the spring fishing was reported over. In the first week of July the usual July school appeared but no catches worthy of note were made.

Lobsters do not appear to have been taken here this season as none were reported.

Mackerel were first reported on 29th July and catches varying from 3 to 7 barrels were taken in traps, while light hauls were made by nets. The average catch from this date until 8th August was fair, after which they were scarce until about the 23rd, when the traps were taken on shore.

Salmon were taken each day in light but regular catches from 12th June until July 10th.

Squid appeared July 6th and good supplies were taken each day until about the 17th after which but few were taken until August 23rd although they were reported plentiful on 7th August but would not jig well after July, which is recognized as the squid month.

On the whole the catches of all kinds of fish for this season were below the average of former years.

ST. PETER'S.

Codfish and Haddock.—Inshore fishing in these branches turned out poorly. The catch made by vessels from this place and immediate vicinity, on Eastern Banks and North Bay, will fall considerably short of former years. The low price for fish and the small quantities caught of all kinds augurs hard times for the most of the coast fishermen.

Herring were first netted about 4th June. Light catches were made for a fortnight, but these were so small that the fishermen could not even supply home consumption. On 19th August a good run struck in, some boats taking from 7 to 30 barrels. But for this the season for herring would have been a total failure. However, in Bras d'Or Lake, spring herring were taken in abundance, also cod in fair quantities.

Lobsters.—This branch opened about 25th April, and light catches were made daily until about 8th May. From this until the end of the season fair catches were taken; and were it not for the very stormy weather destroying the traps and the prevalence of easterly winds, the fishermen would likely have done very well. The catch though is as good as that of 1896. Seven hundred and eighteen cases and thirteen thousand live lobsters were shipped.

Mackerel made their first appearance 22nd May, and light catches were made inshore for a few days. Of those setting in deep water, a few took from 10 to 15 barrels. The fish taken were very large and fat. The rest of the season proved a great failure in this branch. This the fishermen attributed to the easterly winds.

PRINCE EDWARD ISLAND.

ALBERTON.

Codfish were first reported on 8th June, and although the catches were light it is said that they were plentiful on the grounds, as herring and other bait fishes were also there in good supply. As previously reported, the boats here are too small to venture out to any great distance; hence very little attention is given this branch. As an example of what fishermen of this place might do, it is only necessary to say that during August, September and October, boats from Caraquet and Shippegan, N.B., find these shores the best grounds for cod; and occasionally during bad weather there will be as many as 120 of these vessels in port at once.

Hake were rather scarce from 23rd July to the last of the month, but throughout August and until 6th September the catches were fairly good.

Herring struck in on 3rd May, and although reported plentiful at Campbellton during the following week, the catches here varied from fair to good. About the middle of the month they were in good numbers at North Cape and Frog Pond. None were reported in June or July but light catches were pretty regularly made during August. Nothing afterwards reported.

Lobsters were first taken in small numbers on the west shore from Miminégash about 1st May and about a week later on the north side. They were plentiful from 10th to 28th May at North Cape and Tignish, and fair at Black Marsh, on the western side of North Cape. At Tignish, for a week in the middle of May fishermen frequently loaded their boats with good average sized fish. One fisherman, having been more avaricious than his fellow fishermen, overloaded his boat with the result that she sank en route to the shore. On the west shore, at Nail Pond, Frog Pond, Waterford, and as far as Miminégash, there was only about one week's fishing of any importance. At North Cape excellent fishing was found for about 10 days about the middle of May and for the balance of season was fair. During the same period good catches were made at Tignish, Alberton, Kildare and Conway; but poor the remainder of season. On the whole the catch of lobsters is considered about the same as last year, although fully double the number of traps were in the water. It is reported that packers who are fortunate enough to have their factories situated at points or headlands, usually have fair fishing for a much longer period than those who are less fortunate in having their establishments on long straight coast lines or in coves. The high prices for this fish the past season, assisted in a great measure to make the season a fairly remunerative one.

Mackerel first made their appearance on 17th June, and light catches were made quite regularly until 31st August, after which none were reported. The season's catch has been an exceptionally poor one; but it is said that the fishermen are in a

great measure accountable for this as they frighten the fish away by their great numbers of nets and traps. Those taken were by nets, as none were reported to have been taken with hook and line.

BLOOMFIELD OR MIMINEGASH.

Codfish were taken in fair quantities on trawls from 5th June until 11th July, after which none were reported, owing principally to bad weather until October 4th, when light supplies were taken until the season closed.

Hake struck in on 12th July, and fairly good catches were made each day until 23rd August, after which the fishery was poor until the season closed.

Herring.—The spring run struck in in good numbers on 14th May, and good catches were made here and at Campbellton. As the weather was bad the remainder of the month, catches were consequently light; but from 5th to 11th June, inclusive, fair catches were reported each day, while at Cape Wolfe and Campbellton the fishery was good. No second school is reported to have struck during the season.

Lobsters appeared with the herring on 14th May, and catches varying from good to fair were made for about 10 days. After this they became scarce and continued so until the season closed. In the second week of June it was reported that this fishery had been very good at North Cape; but on the whole the catch has been below the average.

Mackerel of very large size appeared 10th June, but the catches were light until 5th July, when fair hauls were made regularly for about 10 days. During the remainder of the season catches, when weather permitted, were light; and it is said that no large school was on the coast the whole season. No reports of this fish taken with hooks were received throughout the season.

GEORGETOWN.

Codfish struck in on or about 29th May, and a fair catch was made inshore with hand line and trawl up to the 20th June. The weather becoming unfavourable, the fish moved off and only poor catches were made by inshore boats to 28th July. They were plentiful on the several banks and continued so throughout the season.

Hake have been plentiful off shore and good catches were made during August and the early part of September. Cod and hake fishing is not successfully prosecuted by the fishermen in this district.

Herring made their appearance about 12th April, when a few were netted daily. On or about 5th May they struck in more plentifully and a number of bankers were supplied with bait. Schools continued to increase up to the 22nd, remaining in the bays and rivers until 1st June, when they moved offshore and were netted until the 15th. While this body of herring was in this vicinity, a large quantity was secured for lobster bait, and a sufficient supply furnished to bankers. The catch is considered equal to that of last year. During the latter part of October and first of November quantities of small herring frequent those bays and rivers.

Lobster fishing commenced about 13th May, and fair catches were made until the 25th, from which date until 14th June the catch was rather poor, but improved again to the 20th. From latter date until 24th July this fishery was poor, with the exception of the 13th, when a fair catch was made inshore. The advance in price paid for lobsters this year should compensate the fishermen for the falling off in catch.

Mackerel fishing has been a failure this year. A few were occasionally netted from the 1st July, and were disposed of locally. Some schools were reported off Boughton Island on 9th July and a fair catch made between netting and hooking. Every effort and device has been employed by the fishermen to capture this fish with hook and line but to no purpose. They could be raised almost in any part of the Gulf, but after securing a few the body would disperse. Some small catches were made off the East Point in September by American vessels.

Squid bait was difficult to procure with jig in the early part of the season, but were more plentiful in the month of October.

MALPEQUE.

Codfish were first reported on 29th May, and the catches throughout the season, when weather permitted, were very fair.

Haddock were taken in fairly good quantities each day from 25th July until 2nd August.

Herring fishery commenced on 5th May, and until the 21st the catches were on an average fairly good, fishermen getting about all they required for bait and home consumption. None reported later.

Lobsters were on an average fair, although irregular, from 17th May until the season closed on 24th July. It is estimated that the pack this season is short of 1896; but as expenses were lighter and better prices obtained, the packers did about as well as in the previous year.

Mackerel made their appearance on 12th June, and light catches were made throughout the season. About 13th August they commenced taking the hook, but the catches did not increase any and the total quantity taken is considered poor.

NEW BRUNSWICK.

BEAVER HARBOUR.

Codfish and *Haddock* struck in about the same time, and from the 18th May until 15th October the catches were light but regular. During the latter part of June and former part of July the haddock catch was slightly in excess of cod. They were also better during the first ten days of September.

Hake were reported in fair quantities on off shore grounds on 4th June, but the catches were light until the 6th, when they became good and remained so until about 2nd August. About 25th June they were plentiful on off shore grounds, and about 12th July were in good numbers at Wolf Island. On 22nd July, boats varied from 1,500 to 2,000 lbs. hake to a run when bait was obtainable. During the remainder of the season, notwithstanding that some very good catches were made, the average was good.

Herring were scarce throughout the early part of the season and brought fairly good prices; but it was not until about the usual time—10th August—that large herring were first reported at Wolf Islands. During the remainder of the season the catches were light, although small herring were reported plentiful.

Lobsters were first reported on 8th May, but the catch until 25th June, when the fishery closed, was light. In the early part of May the demand was good and prices ruled at 10c. each.

Mackerel were only taken in light catches from 9th August to 27th; the first having been taken in weirs here and at Bliss Harbour.

CARAQUET.

Codfish were first reported the past season on 31st May, and the catches were on the whole good throughout the season; although the total catch is considered slightly below that of last year. Bankers during the season obtained good supplies of herring and clam bait which were plentiful.

Herring were taken in light catches as soon as the ice left the harbour about 14th May. On the day following, however, they struck in plentifully, but as bad weather set in about the 26th, for a few days the catches thereafter were light and irregular until the end of June. None were reported throughout July, but during August the catches were light, although boats on the 22nd were reported to vary from 20 to 25 barrels. Total catch considered the smallest for some years past.

Lobsters were first reported on 20th, May but were very scarce the whole season; and the catch is considered even smaller than last year, which was the smallest for some years past.

Mackerel appeared this season on 3rd June, but the catches were very light the whole season.

Salmon. From 27th May, until July 10th the catches were on an average fairly good.

Squid were taken in good supplies from 24th to 30th August, inclusive.

ESCUMINAC.

Codfish were first reported on 26th June, and the catches until the last of September were fair and regular.

Herring were found in good quantities as soon as the coast was clear of ice on May 12th but about the 15th the catches became smaller and they were not reported after the 20th.

Lobsters were also taken first on the 12th in small quantities; and with the exception of a few catches varying from good to fair up to the 20th, they were scarce until fishing closed about 6th July.

Mackerel were taken in light and regular quantities from 8th July to 27th September.

Salmon were first reported on 25th May from which date light catches were regularly made until the 22nd July.

Shad were taken in light but regular catches from the 25th May to the 25th June.

GRAND MANAN.

Codfish were not reported this year until 28th May from which date catches varying from good to fair were made until 25th June. About the middle of June fair fishing was also found on gravelly ground. During the last week of June the catches were light until line fishing was interrupted altogether by dog-fish about 1st July. Throughout the latter part of July the catches varied from very good to fair, but very few catches were made later, except on the outside grounds and various coves, where the fishery ranged from good to poor until the last of September. It is estimated that the total quantity cured will not exceed 1,000 cwt.

Haddock appeared also on 28th May and the catches until 30th June were very fair.

Hake were first reported on 2nd June and the catches throughout the greater part of the month were good. Late in June they became somewhat scarcer and continued so until about the 20th July, after which the catches varied from very good to fair on the different grounds and various fishing places in this district. This fishery shows an increase of about 1,000 cwt. over that of 1896.

Halibut appeared 17th June and the catch is said to have been very light.

With the exception of the hake catch it is said that the past season's operations have been the poorest which the fishermen have experienced for years. This decrease, particularly in the line fishery, is in part due to bad weather during the spring and early part of the summer, but principally to the scarcity of herring in the bay. No particular reason can be assigned for this scarcity unless it may be the insufficient supply of small feed upon which the herring subsist which in former years caused a similar bait exhaustion.

Herring were first reported on 2nd June but the fish were of small size and but few were taken. About 16th July the summer school struck, and for the first few days the catches were light, but afterwards they became more plentiful, and until 23rd September the catches varied from good to poor at all sections. The smoked herring industry which is the most important branch on the island shows a falling off, in comparison with last year, of fully 50 per cent; there having been only about 1,000,000 boxes cured. Fresh herring show a corresponding decrease. The total catch of pickled herring is estimated at 2,000 barrels.

Lobsters.—From 28th May until the season closed the catches were light and irregular, and it is said that the decrease will be about 60 per cent, which is claimed to be due to over fishing of former years.

SHIPPEGAN.

Codfish were first taken on 29th May in small quantities as the weather previous to this had been very rough. Throughout June, July, August and former part of September the inshore fishery was poor but the bank fishery was good; and it is reported that some weeks the largest catches on record were landed. Although the total catch is considered large, the prices rated low as the markets were said to have been overstocked with old fish. The fish taken are dried here and shipped in English barrels to Mediterranean, Spanish and Portuguese ports; while some are shipped in tubs to the West Indies. It is said that several vessels loaded the past season for European ports.

Halibut and Herring.—As far as reported the catches were on an average fairly good.

Lobsters were on an average fairly plentiful the whole season; but owing to continuous rough weather, fishermen were prevented from hauling their cages, and many factories closed early in June, owing to the limited quantities brought in. The small pack realized higher prices, which to many packers will make up for the deficiency in quantity; but the majority of packers will scarcely pay expenses.

Mackerel were first reported on 17th June, but the catch has been very small. The small boats did very poorly as the fish did not strike inshore; but a few Nova Scotia schooners are reported to have made small catches which were salted and shipped to United States ports. Very few have been put in freezers here this season.

Salmon were taken in catches varying from good to fair during the second week of June.

QUEBEC.

GASPÉ.

Codfish were first reported on 24th June, and fair catches were made when weather permitted.

Herring, although not reported, are said to have been about an average catch.

Mackerel again failed to reach these shores the past season.

Salmon were first taken on 7th June, but the catches were light throughout the season.

GRAND RIVER.

Capelin were reported striking in on 15th June, but very few were taken; and it is reported that they have almost disappeared from these shores.

Codfish were first taken on 31st May, but the inshore catch has been small. The bank fishery was good during the whole season and fish were of large size, but dogfish appeared about the middle of the season and caused much annoyance among the bankers. They had never been troubled heretofore by this kind of fish.

Herring appeared plentifully on 5th May and excellent catches were made each day for about a week. During the greater part of the season they were taken in catches varying from good to fair, but about 24th September they became scarce and small, and remained so until the season closed.

Lobsters, although appearing in fair quantities on 5th May, have been a poor catch and a light run, as factories were reported to have closed on 15th June.

Mackerel have been very scarce the whole season; the only catch worthy of note having been made on 23rd July.

Salmon were first reported on 5th June, but this fishery has also been poor and none were captured after 9th July.

Smelt fishery commenced about 7th October, and were reported plentiful, but as fishermen can only ship twice per week, their time is not wholly devoted to this branch.

Squid were first taken on 16th July, but the catches have been light and irregular.

LONG POINT.

Codfish were taken in small quantities each day from 9th to 19th June inclusive, but bad weather setting in nothing was afterwards reported until 1st July, when the fishery was found fairly good. About the 7th good catches were made and whenever weather permitted, fishermen did well. During the first week of August very good catches were reported and although the weather was much broken the catch until the end of September was good.

Herring.—The only catch reported was on 16th August, when a good quantity was taken.

Launce were first reported on 8th June, but the catches were light until the 19th. After this they were not reported until 16th July, when very good catches were made each day until 2nd August, from which date until the last of September the average catch was fair.

Salmon were taken first on 8th June, and the catch each day were fair until the 19th.

MOISIE.

Codfish were first reported on 7th June and catches varying from fair to poor were made until about 27th, after which the catches were very fair until the latter part of September.

Launce struck in good quantities on 3rd July, and some excellent catches were made until about 25th September.

Salmon appeared in small quantities on 2nd June, but the average catch throughout the month was fair.

Squid were fairly plentiful from 6th to 19th August inclusive.

On the whole the season's catch is considered about $\frac{1}{3}$ in advance of that of 1896.

NEWPORT POINT.

Capelin were first reported on 8th June, and the average catch during the remainder of the month was good.

Codfish appeared in light quantities on 29th May, inshore, while during the first week of June boats from banks varied from 17 to 30 drafts. During the remainder of the season the few inshore boats did poorly, owing to scarcity of bait and strong winds; while those on the banks obtained very fair catches, and the total catch is estimated at 9,200 quintals.

Herring appeared plentiful on 4th May, and excellent fishing lasted until the 21st, when there was a slight falling off. Throughout June and July and up to 14th August the average catch was fair, although irregular, and the total season's catch is estimated at 4,000 barrels, which are reported to have been taken for bait.

Lobsters were taken in very fair quantities from 4th to 14th May, inclusive, but afterwards became scarce and remained so until 2nd June, after which none were reported. Total catch estimated at 500 cases, or equal to last year's pack.

Squid were reported in light quantities on the banks on 26th July, but were not afterwards reported until 18th August, from which date the average catch was good until the last of the season.

PASPEBIAC.

Capelin.—Very good catches were reported from 7th to 12th June, inclusive. Nothing afterwards.

Codfish were first reported on 7th June, but with very few exceptions the catches were light until 3rd August. From latter date until 15th October this fish was in good supply, but owing to scarcity of bait and high winds the catches were not very regular.

Herring were reported in good quantities throughout May, but were scarce in June. Very few were taken in July, August or September, but from 6th to 9th October inclusive, the catches were very good.

Squid appeared in fair quantities on 3rd July, but on the 5th became scarce and remained so during the month. A few good catches were made between 18th August and 25th.

PERCÉ.

Codfish were not taken in May owing to high winds, but on 1st June, a light catch was reported after which the fishery became good and the catches throughout the season were satisfactory.

Herring struck in fair quantities on 10th May, and the average catch until 15th June was very good. During the latter part of June they were scarce; but from 16th to 27th July, varied from fair to poor. A few very good catches were made in the second week of August and first week of September, but nothing afterwards owing to high winds.

Lobsters were taken in fair catches each day from 10th to 21st May, but throughout June were scarce.

POINT ST. PETER.

Codfish were first reported on 25th May, and the average catch throughout the season was fair. On 12th June it was reported that Alexander & Co., had 300 drafts more up to that date than in the corresponding time in 1896. About 18th July, they were reported plentiful on off shore grounds, but the high winds which prevailed during the greater part of the season prevented good fishing. The average per boat for season is estimated at 125 drafts.

Herring appeared in fair quantities on 4th May, and the average catch until about 11th June was good. During the remainder of the season the catches varied from fair to poor. It is said that the greater portion taken was used for bait, as only a very few barrels have been salted.

Lobsters were taken in catches varying from good to fair, from 4th to 31st May, but during the remainder of the season were scarce.

Squid.—The average catches of squid from 29th July to 15th October, were fair.

SEVEN ISLANDS.

Codfish were first reported on 7th June, but the catches were light until the last of August. Throughout September, when weather permitted, the catches were fairly good; but in October the weather was too stormy for fishing.

Herring were reported to have struck in off this station and Point de Monts, on 17th May, but no catches were made until the 31st, which were light. About 30th June, they again appeared in small quantities but nothing of consequence was afterwards reported.

Launce appeared in fair quantities on 31st May, but were not taken with any regularity until about 25th June, from which date the catches were on an average very good until the latter part of September.

Salmon were first taken in fair quantities on 31st May, but the season's catch is estimated about 50 per cent below that of 1896.

Squid were taken in fair quantities from 9th to 19th August, inclusive.

STE. MARGUERITE.

Codfish were not taken regularly, but whenever weather permitted, the catches were very fair from 17th July, until 27th September.

Launce appeared in good quantities on 17th July and good catches were made until bad weather set in about 11th August, and no catches were then made. On 1st September, they were reported plentiful and continued so until the 25th, after which date none were reported.

ANTICOSTI.

ENGLISH BAY.

Capelin struck in at all points on the island after the stormy period about 16th June in great abundance, and were reported coming ashore in quantities at all stations until the last of the month.

Codfish—No fishing at this station and western end of island the past season, as the inhabitants were generally occupied on their lands or working for Mr. Menier.

Herring struck in fair quantities on 25th May, but the catches were generally poor as the weather was rough.

Squid were very good throughout September and former part of October, and were taken in unusually large quantities.

FOX BAY.

Capelin.—See English Bay.

Codfish were only taken in very light catches until herring struck early in August. After that fishing was generally good, and was reported fair at Heath Point until the end of September. The total catch of the three boats is estimated at 103 quintals which was mostly taken at Heath Point.

Herring struck in plentifully on 25th May, and continued good until about 7th June. They again struck in 24th June and continued abundant for a few days. After this they were scarce until about 7th August, when they struck in abundance at Heath Point and varied from good to fair at all sections of eastern part of island until 27th September.

SOUTH-WEST POINT.

Capelin.—See English Bay.

Codfish were not sought after during the season; but it is reported that in the early part of October they appeared in good quantities.

Squid are reported to have come ashore in unusually large quantities throughout September and former part of October.

STRAWBERRY COVE.

Capelin.—See English Bay.

Codfish were first reported on 25th May, and were taken in fair quantities until about the last of June; after which very little has been taken. Total catch of 20 boats estimated between 500 and 600 quintals.

Squid.—See English Bay.

MAGDALEN ISLANDS.

Codfish were taken in light catches on 26th May, and for about a month the quantity taken was small, as only a few boats were engaged in this branch, notwithstanding the fact that they were in fair quantities on the grounds. From 26th June until 12th July, the catch was fair, but boats were prevented from going out regularly by bad weather. From latter date until about the middle of September, the catches were light; owing chiefly to the great scarcity of bait.

Herring.—The spring run struck in about 13th May in small quantities; but about the middle of the month they became plentiful in the various bays and large quantities are reported to have been taken for local use and bait. They were not reported afterwards until 9th September, when light catches of large fish were made each day for about a week. It is reported that the spring catch was about equal to that of 1896.

Lobsters, owing to the late spring, were not taken until 8th May, but the prospects were encouraging as herring were reported plentiful. From 25th May until about 11th June the catches varied from fair to good; but as a large number of traps were lost on the northern part of the islands during the first week of June, it crippled the fishermen so that the catch was not general thereafter. From 11th June until the close of the season the catches were light, although reports from Bryon Island indicated good fishing on 22nd June. On 12th July, it was reported that all factories had closed on account of the scarcity of fish. It is felt that different regulations should be enacted respecting the lobster fishery in this district, as it is usually late when traps are set and the inhabitants are wholly dependent on the fisheries.

Mackerel appeared on 31st May, and light catches were made by netters until about 17th June, about which time the spring fishery was reported to have been a failure, as vessels with from 100 to 125 nets had only an average of about 45 barrels. About 23rd July, light catches were reported on the north-eastern part of the islands, but the hauls were not general and did not increase, although in the second week of September they were reported plentiful, but bad weather prevented successful fishing.

On the whole the spring and fall catches have been very light, for whereas three years ago over 1,500 barrels were taken, this year the estimated total will not exceed 200 barrels.

I have the honour to be, sir, your obedient servant,

W. M. HUTCHINS,

Clerk in charge Fisheries Intelligence Bureau.

APPENDIX No. 13.

THE FUR SEALING INDUSTRY OF THE NORTH PACIFIC OCEAN AS AFFECTED BY THE BEHRING SEA AWARD AND CONSEQUENT LEGISLATION.

BY R. N. VENNING.

THE BEHRING SEA QUESTION.

For a series of years past the departmental reports have contained a short résumé of the main features of this question, as they have developed from year to year; the "Twenty-ninth Annual Report of the Department of Marine and Fisheries 1896—Fisheries." (Sessional Paper No. 11a, 1897), bringing it up to the end of 1896, at which point the present article will resume it for the current year, following somewhat the same order.

DEPARTURE OF THE SEALING FLEET.

The spring sealing fleet comprising 43 vessels, began clearing for the season of 1897, early in December, 1896; the first vessel cleared on the 3rd, and by the end of the month eighteen had cleared. In January, 1897, seven other followed; in February, ten, and in March, eight.

This fleet was divided into two sections as follows:—

VESSELS OPERATING ON THE NORTH AMERICAN COAST OF THE PACIFIC OCEAN.

License.	Schooners.	Tons.	Masters.	Cleared.
1	Mary Taylor.....	43	P. Carlson	Dec. 3, 1896
3	C. D. Rand	51	J. O. Townsend	do 9 do
4	Mary Ellen	63	D. McPhee	do 9 do
7	Osprey	40	G. McDougall	do 14 do
10	Ainoko	76	G. Heater	do 21 do
12	Allie J. Alger	75	R. O. Lavender	do 24 do
15	E. B. Marvin	96	Chas. J. Harris	do 30 do
16	Sapphire	109	Wm. Cox	do 30 do
17	Triumph	96	C. N. Cox	do 30 do
18	Pioneer	66	W. E. Baker	do 31 do
21	Annateur	18	C. Jipson	Jan. 20, 1897
23	Pachwellis	20	J. Nyetam	do 21 do
24	Fisher Maid	21	C. Chippis	do 21 do
25	Mountain Chief	23	Nawassum	do 21 do
26	Penelope	70	D. G. Macauley	Feb. 6, do
27	Beatrice	66	Wm Heater	do 6 do
28	Cape Beale	13	J. E. Quap	do 9 do
29	Maud S	97	R. E. McKeil	do 19 do
30	Dora Siewerd	93	H. F. Siewerd	do 20 do
31	Zillah May	66	S. Balcum	do 20 do
32	Otto	86	J. McLeod	do 24 do
33	Minnie	49	V. Jacobsen	do 24 do
34	City of San Diego	46	D. Martin	do 26 do
35	Arietis	86	P. Martin	do 27 do
36	Ocean Belle	83	R. Cox	Mar. 1, do
37	Enterprise	69	J. W. Todd	do 4 do
38	Teresa	63	G. Meyer	do 17 do
39	Labrador	25	M. Pike	do 18 do
40	Fawn	59	M. Foley	do 18 do
41	Chacheemah	10	H. Chacheemah	do 18 do
42	South Bend	21	C. F. Dillon	do 18 do
43	Annie (sloop)	9	C. Spring	do 20 do

In all 32 vessels.

VESSELS OPERATING ON THE JAPAN COAST OF THE NORTH PACIFIC OCEAN.

License.	Schooners.	Tons.	Masters.	Cleared.
2	Casco	63	Chas. Le Blanc	Dec. 8, 1896.
5	Mermaid	73	Jas. W. Anderson.....	do 10, do
6	Umbrina	99	Chas. Campbell	do 12, do
8	Annie E. Paint	32	Alf. Bissett	do 19, do
9	Geneva	92	Wm. O'Leary	do 21, do
11	Carlotta G. Cox	76	Wm. D. Byers	do 22, do
13	Director	87	F. W. Gilbert	do 28, do
14	Borealis	37	Andrew Nelson	do 29, do
19	Sadie Turpel	56	A. S. Crane	Jan. 4, 1897.
20	Agnes McDonald	107	M. F. Cutler	do 15, do
22	Vera	60	Wm. T. Bragg	do 21, do

In all 11 vessels.

While the whole of these vessels engaged in that branch of the industry known as the spring fishery, all but fourteen of them operated later on in the Behring Sea fishery, which begins only on the 1st August, after the expiry of the close season provided by the Paris Award. Those of the sealers which confine their spring operations to the American side of the Pacific Ocean, return to Victoria to await the summer fishery in Behring Sea, after the seals have disappeared from the coast, or in other words have entered Behring Sea.

Those, however, who have exploited the Asiatic waters, cross over into Behring Sea when the open season begins. These it will be seen form much the smaller factor in the Behring Sea fleet.

The following table represents a complete list of the fleet which cleared for Behring Sea during 1897, and shows that out of the full fleet of 44 vessels clearing during that year, 30 wore destined to Behring Sea.

SEALING VESSELS CLEARED FOR BEHRING SEA, SEASON 1897.

No.	Vessels.	Tons.	No. of License.	Master.	Cleared for.
1	Mary Taylor.....	46	1	F. Cole.....	Behring Sea from Victoria.
2	Casco.....	63	2	C. Le Blanc.....	do now in Japan.
3	Mermaid.....	73	5	S. W. Anderson.....	do do
4	Umbrina.....	99	6	C. Campbell.....	do do
5	Annie E. Paint.....	82	8	A. Bissett.....	do do
6	Geneva.....	92	9	W. O'Leary.....	do do
7	Ainoko.....	75	10	G. Heater.....	do from Victoria.
8	Carlotta G. Cox.....	76	11	W. D. Byers.....	do now in Japan.
9	Director.....	87	13	F. W. Gilbert.....	do do
10	Borealis.....	37	14	A. Nelson.....	do do
11	E. B. Marvin.....	36	15	C. I. Harris.....	do from Victoria.
12	Triumph.....	98	17	C. N. Cox.....	do do
13	Pioneer.....	66	18	W. E. Baker.....	do now Copper Id.
14	Sadie Turpel.....	56	19	A. S. Crane.....	do now in Japan.
15	Vera.....	60	22	W. T. Bragg.....	do do
16	Penelope.....	70	26	D. G. Macauley.....	do from Victoria.
17	Beatrice.....	66	27	W. Heater.....	do do
18	Dora Siewerd.....	93	30	H. F. Siewerd.....	do do
19	Zillah May.*.....	66	31	S. Balcan.....	do do
20	Otto.....	86	32	J. McLeod.....	do do
21	Minnie.....	46	33	V. Jacobsen.....	do do
22	City of San Diego.....	46	34	D. Martin.....	do do
23	Arietis.....	86	35	P. Martin.....	do do
24	Ocean Belle.....	83	36	R. Cox.....	do do
25	Enterprise.....	69	37	J. W. Todd.....	do do
26	Teresa.....	63	38	G. Meyer.....	do do
27	Fawn.....	59	40	M. Foley.....	do do
28	South Bend.....	21	42	C. F. Dillon.....	do do
29	Victoria.....	63	44	R. Balcan.....	do do
30	Favourite.....	80	45	R. McLean.....	do do

It will be observed that as previously intimated, of these vessels so cleared direct from Victoria, ten crossed from the Japan coast, and one from vicinity of Russian Islands.

THE SEASON'S CATCH.

The following table prepared by the collector of customs, at Victoria, B.C., comprises a complete detailed return of the season's operations of the Canadian sealing fleet, and a statement of the vessels, tonnage, masters, crews, both whites and Indians, as well as boats and canoes employed in the industry.

Vessels.	Tons.	Master.	CREWS.		BOATS.		British Columbia Coast.	
			White.	Indians.	Boats.	Canoes.	Males.	Females.
Agnes McDonald.....	107	F. M. Cutler.....	27		8			
Ainoko.....	75	G. Heater.....	6	26	2	13	22	385
Allie I. Alger.....	75	R. A. Lavender..	24		7		286	354
Amateur.....	18	C. Jipson.....		14		7	1	19
Annie E. Paint.....	82	A. Bissett.....	26		9		26	45
Arietis.....	86	P. Martin.....	6	27	2	14	96	71
Beatrice.....	66	W. Heater.....	4	25	2	12	103	55
Borealis.....	39	A. Nelson.....	20		6			
Casco.....	63	C. Le Blanc.....	20		6		5	9
C. D. Rand.....	51	J. A. Townsend..	21		6		147	155
C. G. Cox.....	76	W. D. Byers.....	26		8		62	110
City of San Diego.....	46	L. McGrath.....	6	18	1	9	39	22
Director.....	87	F. W. Gilbert.....	23		7		1	3
Dora Siewerd.....	94	H. F. Siewerd.....	8	30	2	15	52	33
E. B. Marvin.....	96	C. J. Harris.....	9	32	2	16	154	123
Enterprise.....	69	J. W. Todd.....	8	26	2	13	21	17
Favorite.....	80	L. McLean.....	7	26	2	13		
Fawn.....	58	M. Foley.....	6	20	1	10	29	22
Fisher Maid.....	21	C. Chipps.....		13		6	7	20
Geneva.....	93	W. O'Leary.....	20		6			
Labrador.....	25	M. Pyke.....	6		3		14	11
Mary Taylor.....	43	F. Cole.....	7	24	2	12	80	229
Mary Ellen.....	63	D. McPhee.....	24		7		123	167
Maud S.....	97	R. McKiel.....	7	20	2	10		
Minnie.....	46	V. Jacobsen.....	6	22	2	11	59	42
Mermaid.....	73	J. W. Anderson..	22		7		12	139
Mountain Chief.....	23	J. Nawassum.....		16		8	5	7
Ocean Bell.....	83	R. Cox.....	7	23	3	11	130	37
Otto.....	86	J. McLeod.....	7	35	3	14	128	65
Pachwelis.....	19	J. Nyetam.....		20		10	9	15
Penelope.....	70	D. McCauley.....	6	25	2	12	89	30
Pioneer.....	76	W. E. Baker.....	24		7		210	392
Sadie Turpel.....	56	A. L. Crane.....	23		7			
Sapphire.....	109	W. Cox.....	9	30	2	15	68	30
South Bend.....	21	E. F. Dillon.....	4	9	1	5		1
Teresa.....	63	G. Meyer.....	8	24	2	12	18	35
Triumph.....	98	C. N. Cox.....	7	40	3	18	142	67
Umbrina.....	99	C. Campbell.....	25		7			
Vera.....	60	W. T. Bragg.....	20		6			
Victoria.....	60	J. Haan.....	9	18	2	10		
Zillah May.....	66	S. Balcum.....	7	24	2	12	125	39
Canoes.....								
*41 vessels.....	2,708		495	587	149	288	2,263	2,819

RECAPITULATION.

Crews.	White.	Indian.	Total.	Boats and Canoes	Boats.	Canoes.	Total.
	495	587	1,082		149	288	437
Sealing Stations.					Males.	Females	Totals.
British Columbia and North Pacific Coast.					2,263	2,819	5,082
Japan Coast.					3,677	3,644	7,321
Copper Island Coast.					454	928	1,382
Behring Sea.					6,549	9,058	15,607
Total.					12,943	16,449	29,392
Indian Canoe Catch.							1,018
Grand Total.							30,410

Sealing Report, 1897.

PARTICULARS OF CATCH.						Total.	Remarks.	Number of Special Sealing License.
Japan Coast.		Vicinity Copper Island.		Behring Sea.				
Males.	Females.	Males.	Females.	Males.	Females.			
308	181			512	412	489	{ Wrecked, 5 miles south of Akishi, Japan, 21st June, 1897. }	20
						1,331		10
						640		12
						20		21
373	446	6	9	136	257	1,298		8
				368	529	1,064		35
				217	362	737		27
154	154	2	4	66	246	626		14
432	430	49	139			1,064		2
						302		3
381	637	85	163			1,438		11
				182	220	463		34
426	439	56	127			1,052		13
				558	696	1,339		30
				396	577	1,250		15
				134	381	553		37
				299	254	553		45
				233	207	491		40
						27		24
120	269	88	249	25	53	804		9
				195	370	25		39
						944		1
						290		4
				403	492	996	{ Wrecked, catch of 11 skins lost, Queen Charlotte Isl's, Apl. 23 '97 }	29
468	362	40	102			1,123		33
						12		5
				449	343	959		25
				404	424	1,021		36
						24		32
				292	411	822		23
		128	135	10	3	822		26
430	217			88	164	878		18
						899		19
						98	{ Burnt at sea, lat. 48°30' N, long. 125°55' W., April 23rd, 1897. }	16
						1		42
				235	560	848		38
				690	861	1,760		17
433	385			48	142	1,008		6
152	124			114	150	540		22
				96	680	776		44
				399	264	827		31
						1,018	Indian catch, B. C. coast.	....
3,677	3,644	454	928	6,549	9,058	30,410		

While the catch this season has fallen much below the average, the number of vessels engaged decreased from 64 in the previous year to 44, a figure far smaller than the average for the past seven years.

This is attributed to many causes, the remedy of some of which may be in the hands of the sealers themselves. The tremendous drop in the price of sealskins, together with previous small profits, and the misfortune of the loss of vessels, unwittingly getting within the prohibited zone, and other minor matters all, however, have had a tendency to deter many of the vessel owners from embarking in the industry this season. While a continuance of like conditions might be expected to continue this deterrent effect, it is nevertheless true that considering the number of vessels actually employed, the catch of this season does not fall much below the average catch per vessel in the previous year; hence the result of the London sales of sealskins just reported, which shows a jump of 20 per cent higher than the last sale, may make the season's venture a lucrative one for those who were engaged in it.

As the information of this large advance in the price of skins comes at a time when the sealers are actually preparing for their voyages, it cannot but exert a great influence on the owners of sealing vessels who, under the low prices prevailing, would not have fitted out this year. Hence in the face of this incentive there is every reason to expect that many of the schooners which, otherwise would have remained in port, will be found in the sealing fleet of 1898.

It is worthy of note that even in years when the smallest catches have been made, the sealers have reported plenty of seals at sea, that is to say that generally speaking they observed no marked diminution in the number of seals seen as compared with previous years, nor have such reports been confined to them. The captains of patrolling vessels have given similar testimony. That larger catches have not been taken under these conditions has been attributed to stormy weather and to increased wariness of the seals.

The present season is no exception to this rule and the reports still exist.

In considering the question of stormy weather as affecting the catch, it should not be forgotten that in the earlier days, when the sealers could enter Behring Sea in June, and leave when they chose, the comparatively stormy weather of the latter part of August and beginning of September, used to be considered so correspondingly unfit for sealing, that many of them having had almost a full season in the sea, left in August, and very few, if any, remained after the first week of September.

There were, of course, exceptions to this rule, and it was proved that good catches could be and were made well on into September, but when the sealers had made a fair average catch during June, July and August, as the boisterous weather approached and their crews and hunters desired to return home, they generally left on account of so-called bad weather. The unpropitiousness of the weather of course increased as the season advanced. Thus we find in the early history of the industry that comparatively little or no bad weather was experienced in actual hunting operations. These conditions, by the Paris regulations, are entirely changed. Apart from the widening of the territorial zone to one of 60 miles, necessitating a correspondingly greater distance from the lee of the shores, the close season is so arranged that vessels are not permitted to enter Behring Sea before 1st August, after two of the best sealing months are over, and very shortly before the admittedly bad weather has begun.

An examination of the sealing logs on file in the department, will show that of the vessels in Behring Sea this year, the last hunting days were as follows:—

1 vessel, 8 September.

1	do	11	do
2	do	13	do
1	do	14	do
4	do	15	do

4 vessels, 17 September,

8	do	19	do
1	do	21	do
1	do	26	do
1	do		4 October.

So that it will be seen that the Behring Sea season consists of little over a month and a half, not half of which period is favoured with admittedly good weather, as judged by the old standard, and that vessels to make anything like a profitable venture are compelled to remain hunting as long as the weather will permit, or practically a month later than the date which in the earlier years of the business was tacitly looked upon as the beginning of unfavourable weather.

It would thus appear that so far as the Behring Sea season is concerned, there can be no doubt that the hunting operations under the terms of the Paris Award, are necessarily pursued in much more boisterous and therefore unpropitious weather, than when the hunting was carried on in June and July as well as August.

Nor is the change of conditions confined to the effect produced through change of dates and consequent weather, but it has been suggested that the increasing wariness of the seals may be largely due to the constant disturbance of the water of the sealing grounds by the propellers of patrolling cruisers.

It might perhaps be interesting to briefly examine the possible effect in this direction of the extensive patrol as conducted. A brief scrutiny of the logs of the sealers on file in the department, will show the average position of the sealers in Behring Sea to have been, this season, to the south and south-east of a 60 mile zone around the Pribylov Islands; thence a reasonable hunting distance seaward in the track of the seals.

The bulk of the sealers were, therefore, to be found in what may be called a comparatively restricted area.

Whatever may be argued as to the effect of the moving vessels upon the animals and their timidity generally, from a natural history point of view, involving their subsequent movements or change of habitat, from a practical point of view it does not seem open to doubt that it must exert an immense influence upon the operations of the sealers hunting at sea. It is a well-known fact that successful seal hunters depend principally upon finding the seals asleep at sea, and that although they are taken at other times, and the sealer will try for everything within reasonable reach, it is from the sleeping animals that the sure and remunerative "takes" are sought after and secured.

It therefore goes without saying that any constant commotion in these remote seas caused by the disturbance of the waters, involved in the passing and re-passing of these steamers, must at least to the extent it would disturb seals asleep upon the surface of the sea, deter or hinder successful seal hunting.

When it is considered that the early pelagic sealing operations began in these seas when they were to all intents and purposes peaceful, and unaffected by any of the disturbing influences of vessels of war or of commerce, it should not require much argument to force the conclusion that the changed conditions must materially influence the success of the hunters.

The point which such interference might reach could perhaps best be suggested by a glance at the charts showing the tracks of the United States patrol fleet in Behring Sea, were these available at the moment, but in the Departmental Report for 1895, under the heading "Boarding of British Vessels by U.S. Patrol Ships" the extent of the patrol is shown at considerable length.

Out of 35 vessels visited between the 3rd August and 20th September,

7	vessels	were	boarded	once.
10	do	do	twice.	
4	do	do	three times.	
6	do	do	four times.	
5	do	do	five times.	
3	do	do	six times.	

This represented actual visits to sealers irrespective of constant passing and re-passing.

This year there were 8 steamers engaged in the patrol.

THE PATROL FLEET.

The vessels engaged in the patrol of Behring Sea, during the season, to enforce the award regulations, were H.M.S. "Amphion," "Wild Swan" and "Pheasant," and the United States revenue cutters "Bear," "Rush," "Corwin," "Perry," and "Grant."

DISASTERS.

The list of casualties this year was somewhat large as compared with the comparatively small fleet.

The schooner "Agnes McDonald," 107 tons, was wrecked 5 miles south of Akishi, on the coast of Japan on the 21st June, 1897.

The schooner "Maud S," 97 tons, was wrecked off Queen Charlotte Islands on April 23rd, 1897, and the schooner "Sapphire," 109 tons, was burned at sea in latitude 48° 36' N, longitude 125° 55' W, on the 23rd April, 1897. It will be noticed that these vessels were among the largest in the fleet.

PROPOSALS FOR SUPPLEMENTARY ARRANGEMENTS.

In the report of last year, under the heading "Proposal for supplementary arrangements as to fire-arms and expert examination of seal skins," the propositions of the United States government in this regard were explained and their previous connection with the agreement for sealing up of fire-arms, referred to.

As regards the proposal for an expert examination of seal skins by United States officials on the return of the vessels to their home ports, for the purpose of determining the sexes of the animals from which they had been taken and whether they had been killed by spears or fire-arms, it was shown the Canadian government had been wholly unable to assent to such an expedient, and the grounds upon which such a decision was reached were fully explained.

Touching the concurrent proposal which was:—

1. That vessels proceeding direct to Behring Sea from Victoria, should present the certificate of the collector of customs that no fire-arms were on board, to the collector of customs, or to the commander of the United States fleet patrolling Behring Sea, at Ounalaska; that thereupon such vessels be searched by duly authorized patrolling officers, and the fact endorsed on the certificate, that such certificate duly endorsed may be accepted by the officers of the patrolling vessels as evidence of the fact that no fire-arms are concealed on board; unless some information or evidence of violation of law, other than mere suspicion, is in the possession of, or found by the boarding officer.

Although unwilling to admit the necessity for the endorsement of the British certificate by United States officials, rather than appear as interposing any undue objections to proposals of such a nature as to render their acceptance at all possible, the Canadian government yielded to the wishes of the United States government, on condition that it should be distinctly understood that the language of the proposal should be changed so that the words "may be accepted" should read "shall be accepted," and that the endorsed certificate should be accepted by all boarding officers as proof that no fire-arms were carried.

The United States government, however, were unwilling to agree that the endorsement under such conditions should be final, holding that further search would be useful.

Thus no agreement was reached during the sealing season for the application of any supplementary proposals.

Correspondence on the subject was renewed by the United States in an endeavour to secure some arrangement which might be put in force during the season just closed, and they pressed for an agreement involving a return to the arrangement for the sealing up of arms.

On renewal of these propositions, the ground taken by the Canadian government was that there was nothing to justify supplementary measures in excess of the actual requirements of the Behring Sea Award Regulations.

The question had already engaged the attention of the government which had been willing to sanction a conditional agreement touching certificates of sealing vessels as to the presence of fire-arms on board in Behring Sea, which had failed to satisfy the United States, even though providing for a search by their own officials.

While nothing had occurred to change the views of the Canadian government, which still had full force and effect, and therefore no grounds existed upon which a reversal of those views could be based, and while still adhering to the belief that the practical extension of the regulations in the direction asked by the United States, instead of being operative of good, would prove a source of further complication and difficulty, nevertheless if in the opinion of Her Majesty's government the sealing up of arms on voluntary application of the masters, would tend to obviate useless searching and consequent irritation arising therefrom; and if Her Majesty's government were further of opinion that any guarantee against its improper use with attendant immunity from interference could be had, the Canadian government, with every desire to remove all cause of friction, would be inclined to defer to the wishes of Her Majesty's government, in so far as a renewal of the agreement for the sealing up of arms was concerned.

As regarded, however, the suggested examination of seal-skins on the arrival of the vessels at their port of destination, Canada remained satisfied that the reasons previously given were conclusive against the unnecessary concessions which the adoption of such a regulation would involve.

When the willingness of Her Majesty's government to renew the agreement for the sealing up of arms which had been in force during 1894, was communicated to the United States government, objection was taken to the insufficiency of such an arrangement, which it was said, was merely of a temporary and provisional nature, and inadequate to properly carry out the intent and purpose of the award, and therefore the proposal of Her Majesty's government for a renewal of the said arrangements was not acceptable to the United States' government.

At the same time the United States offered to give British sealers the benefit of articles IV., V. and VI. of the "Regulations governing (United States) vessels employed in the fur-seal fishing during the season of 1897."

The articles read as follows:—

ARTICLE 4.

In order to protect from unnecessary interference, sealing vessels found within the area of the award, during the closed season (that is to say between 30th April and 1st August), but which have not violated the law, any sealing vessel intending to traverse the area of the award during said closed season, on her way to her home or other port, or to or from the sealing grounds, or for any other legitimate purpose, may, on the application of the master, have her sealing outfit, including guns and ammunition, secured under seal, and an entry thereof made on her log-book. Such sealing up and entry shall be a protection to the vessel against seizure during the closed season, by any cruiser, so long as the seals so affixed shall remain unbroken, unless there shall be evidence of violation of the articles of the Award and said Act of Congress of 6th April, 1894, notwithstanding.

ARTICLE 5.

Such sealing up and entry may be effected in port or at sea, by any naval, consular, or customs officer of the United States, and at sea also by the commander of a British cruiser. An officer will be stationed at the island of Attu for this purpose from 1st July to 25th August.

The officer effecting the sealing up shall make entry in the vessel's log-book, certifying the fact and stating in detail the number and kind of guns and other sealing implements, the amount and kind of ammunition, and the number and sex of the seals and seal-skins on board.

ARTICLE 6.

All sailing vessels, bound to Behring Sea for the fur-seal fisheries, shall, before engaging in fur-seal fishing within the Award area in said sea, report to the officer of the Revenue Cutter Service stationed at Attu Island, or to the Deputy Collector of Customs at Unalaska.

The said officers shall respectively secure under seal the guns and ammunition on board all vessels thus reporting, which have not already been so secured under the provisions of article 4 of these rules and regulations, and shall in either event, make due entry thereof on the log-book of said vessel, stating in detail the number and kind of guns and other sealing implements, the amount and kind of ammunition, and the number and sex of the seals and seal-skins on board. Such sealing up shall afford the same protection as is provided under said article 4. In lieu of said sealing up the master of any vessel so reporting may deliver all guns and ammunition on board to the customs or revenue officers, respectively, in charge of said islands, said guns and ammunition to be held at the sole risk of said master until called for at the end of the sealing season.

Her Majesty's government was unable to accept the proposal for the adaptation of these regulations to British sealing vessels, but announced its willingness to instruct and subsequently did issue instructions to Her Majesty's ships patrolling the area affected by the Award, to seal up the arms and ammunition of any British vessel which might apply to them for the purpose, and at the same time to enter the fact upon the vessel's log.

This was acknowledged by the United States government, although it was feared that the intimation would reach the commander of the United States patrol fleet too late for the sealing season.

REQUEST OF SEALERS FOR RELAXATION OF PARIS REGULATIONS.

Early in the year the government received from the Governor of British Columbia an approved report of a committee of the Executive Council, setting forth that any agreement such as appeared possible for the closure of Behring Sea, would practically destroy the sealing industry in the province and jeopardize the financial position of a large number of persons whose interests were involved.

The present regulations had seriously affected the sealing industry and caused a falling off in the catch, which coupled with the low prices prevailing in the London markets, had resulted in great loss to the owners of sealing schooners and all concerned.

Three of the best sealing months—two on the coast and one in Behring Sea—formed the close season, and in other respects the regulations were arbitrary and excessively severe, therefore any revision should be in the direction of modification and provide against hardships and loss to the fleet, arising out of seizures on merely suspicious circumstances or for technical violations of the law, in order that the sealing business might be placed on a more secure basis.

This was followed by a further report of the Executive Council suggesting certain changes in the regulations, if a modification be found desirable at the end of 1898, in accordance with the award.

The adoption of such regulations it was thought would enable the sealers to carry on their industry without any unnecessary loss, and without any serious detriment to the seal herds.

These representations on behalf of the sealers were forwarded to Her Majesty's government, in order that they should have the benefit of the views of the sealers when approaching the discussion of any revision of the regulations, which may eventually require consideration.

It may not be inopportune, to remark in this connection, that notwithstanding the attitude of the United States government, and their unwearying efforts to mould the general opinion in the direction that seal hunting at sea must of necessity be discontinued, under the circumstances; there is nothing whatever in the Paris Award, nor in the specific portion thereof, which provides for a possible revision, that can give any colour to a demand that such a revision must need be directed solely to the detriment of pelagic sealing.

It is not to be forgotten that the necessity for a revision or modification of these restrictions is, by the terms of the award, made contingent upon the common agreement of the two governments, and a submission thereof every five years to a new examination is to enable both interested governments to consider whether, in the light of past experience, there is occasion for any change.

Considering the present condition of affairs, it may be that the full limit of restriction, especially in Behring Sea, consistent with a reasonable participation in the business, has been exceeded by the present regulations.

There is no necessity to attempt to justify the pelagic sealers; they are established in their vocation, with rights to be respected on the one hand and protected on the other; hence any new regulations must contemplate this position.

The opposing side should surely face the facts as they are found to exist, and if it be established that the two interests cannot proceed side by side, there seems to be no reason why the more general one should be sacrificed if the exigencies of the case seemed to demand the sacrifice of either.

PROPOSED CHANGES IN AWARD REGULATIONS.

Since the first year's test of the Paris Regulations, the United States government have been unremitting in their efforts to effect a revision of the restrictions upon pelagic sealing, and to bring into use some other code of regulations designed to entirely suppress all killing of seals at sea.

In April, 1897, this phase of the question developed in a proposal through the United States Ambassador at London, setting forth that as a result of the investigations into seal life conducted during 1896, the existing state of the Alaskan seals had forced itself, in the midst of many cares attending the organization of the administration, upon the attention of the President, to whom the depleted condition and prospective early extinction of the herd are matters of grave concern.

The Ambassador was consequently directed to communicate to Her Majesty's government the President's earnest hope and expectation that effective measures be immediately adopted by the respective governments, with a view to putting a stop to the indiscriminate slaughter of seals through pelagic sealing.

An immediate *modus vivendi*, based upon that of 1891, with equitable provision for the various interests involved, suspending all killing of all seals during the season of 1897, in Behring Sea, was proposed, such *modus vivendi* to be accompanied by an arrangement for a joint conference of the powers concerned for the purpose of agreeing upon necessary measures for the preservation of the seals in the North Pacific Ocean from extermination.

It was argued that to defer taking up the subject until the termination of the season of 1898, as contemplated by the Paris Award, would be fatal to the object in view, as should the destruction continue during two more seasons, the seals would have disappeared, and with them the necessity for a conference.

The views of the Canadian government as to the statement that the inference to be drawn from recent investigations was corroborative of the previous statements of the United States authorities as to the extent of the alleged decrease in seal life, were shown in an examination of the estimates in the number of fur-seals of all classes on the Pribylov Islands in 1895 and 1896.

Reference to United States Senate Executive Document, No. 137, part II., 54th Congress, 1st Session, p. 234, showed that Mr. Charles H. Townsend in 1895, estimated the number of breeding females on St. Paul and St. George Islands at 65,239 at the height of the season; 75,000 was the largest number he would admit were there.

Mr. Townsend is said to have had greater experience than any other agent of either the United States or British governments who visited the islands, and his estimate of the number of breeding seals in 1895 might be taken to be as nearly correct as possible.

It was discovered in 1896, however, that the count of breeding females at the height of the season represented only four-sevenths of the actual number, that is to say it was found there were 75 per cent more pups than the number of cows counted, so that in 1895, if the conditions were the same as in 1896, there were according to Mr. Townsend's estimate, 65,239 plus 75 per cent breeding cows, i.e.: 114,166.

Mr. F. W. True, curator of mammals, United States National Museum, also made a careful estimate of the seals of all classes on the Pribylov Islands in 1895. His estimate seems to have been carefully made. His estimate of the number of breeding seals on St. Paul's Island was 61,436, and on St. George Island 8,987, a total for both islands of 70,423. This estimate is about 5,000 higher than Mr. Townsend's specific figure, and about 5,000 lower than his maximum figure. If 75 per cent be added to Mr. True's estimate, the total number of breeding females in 1895 would be 123,240.

The actual number was probably somewhere between the figures of Mr. Townsend and Mr. True.

In 1896, counts and estimates similar to those of Messrs. True and Townsend, for the previous year, were made by Dr. Jordan, United States, Prof. Thompson, British, and Mr. Macoun, Canadian experts.

The actual number of breeding females on the Islands at one time at the height of the season, was estimated to be 81,793 as compared with Mr. Townsend's estimate of 65,239 and Mr. True's of 70,423 in 1895.

The total number of pups born in 1896 (143,071) was found to exceed the number of cows counted by 75 per cent; adding this 75 per cent the result is:—

	Cows.	Pups born.
Mr. True, 1895.....	70,423	123,240
Mr. Townsend, 1895.....	65,239	114,166
Observers of 1896.....	81,793	143,071

The estimates of these years are based on actual counts on several rookeries, and the rookeries available for comparison are Katavie and Lagoon.

In 1895, Mr. True found in Lagoon rookery at the height of the season 1,264 cows. Mr. Townsend found on the same rookery 1,216. Sen. Ex. Doc. No. 137, pt. 2, 54 Cong., 1 Sess., p. 101-135. In 1896 the count of the same rookery at the height of the season showed 1,474 cows. Dr. Jordan's Rept., p. 16.

In 1895 Mr. True found on Katavie rookery 2,640 cows: Mr. Townsend counted only 2,218, however, and Mr. True may have included part of Lukannon rookery which joins Katavie. S. Ex. Doc. p. 101-135.

In 1896 at the height of the season, 3,152 cows were counted on Katavie, a very material increase as compared with even Mr. True's count.

While in 1895 Mr. Townsend made no estimate of the whole number of seals on the Islands, Mr. True did, placing the numbers of bachelors, breeding bulls, cows and pups, on both islands at 155,977. This estimate was too small, because the actual number of cows is now supposed to have been 75 per cent larger than those counted, and he included no estimate of virgin females.

When these two factors are taken into consideration the total number of seals in 1895, according to his estimate, would be about 250,000.

Dr. Jordan in 1896, estimated the whole number of seals on the islands at from 429,147 to 479,147 a number greatly in excess of the 1895 estimates.

Mr. Macoun's estimates for 1896, are considerably higher than Dr. Jordan's. He placed the total number of seals upon the islands at 503,647.

In 1895 Mr. True estimated the whole number of bachelors of all ages, including the quota killed by the company at 24,144, whereas the lessees, during 1896, secured 30,000 first class skins without difficulty.

Therefore there was no evidence or data of any kind showing a decrease in the herd of seals between 1895 and 1896, beyond the bald statements in denunciation of pelagic sealing.

It was contended also that the investigation had practically disposed of one of the principal arguments of the United States as to the cause of death of pups upon the islands. This point is fully dealt with in this article under another heading.

The seizure of British ships on the high seas raised only the question of right under international law, but in the course of the voluminous correspondence the United States successfully contended against the Canadian position, and the Paris Award not only dealt with the question of natural history, which Canada had endeavoured to keep outside the field of arbitration and which involved the regulation of the sealing industry on the high seas, but gave to it a very important position in the findings.

When the award regulations became known the United States authorities and those more intimately connected with the proceedings at Paris, did not hesitate to express the opinion that pelagic sealing could no longer proceed with profit, and that the interests of the lessees of the sealing privileges on the Pribylov Islands would not under the new condition of affairs be injuriously affected.

Every effort was brought to bear for the immediate adoption of legislation, and such legislation and instructions as were provided were considered by Canada to exceed in stringency the Treaty and Award obligations.

But pelagic sealing could and did proceed notwithstanding, and this fact alone was sufficient to condemn the regulations in the face of the undoubted rights of the sealers.

The position that the Paris Regulations should have the fair trial which the five years' term contemplated, or at any rate no revision thereof should be agreed to before the expiry of that term was adhered to, especially as no evidence had been adduced to show that the regulations had failed in their effect.

Touching the proposed international conference, a similar proposition had been advanced in 1895 and fully discussed. The controversy between the United States and Great Britain was limited to the protection of the seals on the Pribylov Islands, a matter in which no other nation had any concern.

No question had ever been raised as to the obligatory nature of the regulations, and obligations to the award, as well as to principle of arbitration, seemed to preclude any precipitate or premature revision.

Those engaged in the legitimate and precarious vocation of pelagic sealing it was considered had reason to expect ordinary protection in their rights, and there was no ground to regard their competition with others other than in the ordinary light.

It is impossible to reconcile the two methods of reaping the seal harvest, but no reason has been shown why the pelagic sealing industry alone should suffer, unless it be a desire for the rehabilitation of the lessees of the islands in a monopoly of the fur-seal business.

Without an entire reversal of position, Canada could not entertain any views on this renewed proposal for a suppression of pelagic sealing other than in direct opposition thereto.

Only two sealing seasons intervened between the date set for the revision of the regulations, and it did not seem unreasonable to expect of the United States government that they should abide by the regulations which had been brought about through their own exertions.

It was believed that it had been clearly demonstrated that there was no ground for the fear expressed by the President of the early extinction of the seal herd, or of the anticipated disappearance of the seals before the time arrives for the revision of the regulations under the terms of the award.

Indeed just grounds appeared to obtain from which to reach the exact opposite conclusion, and no justification was apparent to anticipate any abnormal decrease or destruction during the remaining two seasons.

In the face of the fact that it was the intention of Great Britain and Canada to continue expert examination into seal life during 1897, by which it was expected to augment very considerably the information possessed as to the contentions affecting

the relative destruction of pelagic sealing, which contention had been materially weakened by the observations of 1896; the time did not seem ripe for change.

There was besides a very practical difficulty in the way of an *interim* arrangement in the fact that the sealers were already operating on the Asiatic side, and under the most favourable circumstances any *modus vivendi* could be but a partial success.

Moreover, in view of their vindicted rights, the sealers could with much more reason and justice demand full and complete compensation for the loss or interference with their business than in 1891, before the Paris Award, for which year Great Britain paid them a large sum when they prohibited sealing on Behring Sea, thus admitting the principle of compensation.

Neither Great Britain nor Canada could be expected to contribute to compensation under the changed conditions for a curtailment of rights of the sealers in the open ocean.

However important it might be that wholesome and economic regulations should exist for the preservation of the seal race, there were yet to be safeguarded the interests of Her Majesty's subjects in Canada in a reasonable participation in an important industry expressly sanctioned and regulated by international arbitration.

The result of the proposal was instructions from the Imperial Government to the Ambassador at Washington, 22nd April, 1897, for a reply to the United States Government to the following effect.

Similar statements as to the immediate disappearance of the herd had been made in previous years, but experience had shown that the fears then expressed were groundless, and Her Majesty's government were convinced that they would prove to be equally so on the present occasion. The small catch and low prices obtained for the skins in 1896 brought many of the owners of the sealing vessels to the verge of bankruptcy, and were Her Majesty's government to prohibit pelagic sealing altogether for 1897, it would mean the probable ruin of a considerable number of British subjects engaged in a lawful industry. Of course, if the United States government were prepared to give adequate compensation to the sealing fleet on account of its enforced abstinence from the fishery during the season, Her Majesty's government would have no reason for refusing their assent to the proposal for a *modus vivendi*, but they did not gather that such was the case, and it would be impossible for them to submit a vote to Parliament for the purpose, holding as they did that no sufficient reason had been shown for its necessity.

As regards the proposed conference, Her Majesty's government believed that further investigation was necessary on many points connected with seal life before the questions at issue could be discussed with the hope of attaining any satisfactory result.

Dr. Jordan and Professor Thompson were agreed upon the importance of an accurate count of seals on the principal rookeries during several seasons in order to ascertain the changes from year to year, and there were other important points mentioned in the conclusion of Mr. Thompson's report on which, pending further inquiry, he found it desirable to suspend judgment.

Admittedly, the investigations of 1896 afforded for the first time any really reliable statistics in regard to the condition of the herd, and all previous reports received on the subject were practically valueless for purposes of comparison.

To estimate accurately the effect on the herd of the various agencies for the time at work, reliable statistics, extending over a sufficient period to enable accidental circumstances to be eliminated, should be available, and Her Majesty's government adhered to the view that further investigation was required before the question of revising the regulations could be considered.

In a later communication, 7th May, referring to the same proposal, the Marquis of Salisbury wrote the Ambassador at Washington as follows:

"Until such information is available it would, in the opinion of Her Majesty's government, be premature to enter upon the proposed conference to discuss measures based on conjectures admitted to be of doubtful value, and the interests of this country in the question are too serious to warrant Her Majesty's government in imperilling them by the adoption of any hasty decision."

EXPERT INVESTIGATION ON THE PRIBYLOV ISLANDS.

The expert examination into seal life on the rookeries was continued during the season just closed, Her Majesty's government being represented as in 1896, by Professor D'Arcy Wentworth Thompson and Mr. Barrett-Hamilton, and the Canadian government by Mr. James M. Macoun. The United States representation was entrusted again to Dr. David Starr Jordan and his assistants.

A notable feature in the results of this year's investigations was the discovery of the vast inroads upon the herd by the parasitic worm *uncinaria*, which was found to exist to a most alarming degree in the nursing pups. So destructive is this parasite now known to be that it is admitted that the number of dead pups counted on the rookeries between August 8th and 14th, 1896, 11,045, while recognized to be an under estimate, was almost wholly attributed to the ravages of this deadly scourge, and there is every reason for believing the effect to be continuous throughout the whole season since the death rate still increases.

It will be remembered that prior to the recent investigations into the natural history of the seals, even as recently as 1894 and 1895, the large number of dead pups found upon the islands was charged entirely and without qualification to the effects of pelagic sealing through killing the nursing mothers at sea, their offspring dying from starvation upon the islands.

From that contention the Canadian government has sedulously dissented, holding that some other and more reasonable causes were to be sought for the abnormal death rate of the young pups in their natural environment.

The observations of 1896, however, tended very considerably to nullify the United States contentions, and at least to make it necessary to greatly qualify the broad and unsupported assertions in the one direction. Hence, it was demonstrated that among the natural causes of the death of pups were to be found the important factors: trampling by fighting bulls or by moving bulls and cows; starvation of pups strayed from their mothers or who had lost their mothers from natural causes; ravages of the killer whale; drowning in storms and many other minor causes which might be enumerated.

It may here be mentioned that while in 1896 great stress was laid upon the loss of young seals through trampling, the importance of this particular source of loss was much diminished by the facts demonstrated in 1897 as to the effects of the *uncinaria*.

If Canada had to look for any further vindication of her attitude in this respect, it is surely to be found in the extraordinary developments of 1897, which has unmasked a menace to seal life, in the shape of a parasite, of which the pelagic sealers are profoundly innocent, and which far outweighs any factor of destruction that has ever yet been shown to obtain or even has been charged.

The facility with which this cause of death might be confounded with starvation, will appear from the following extract from Mr. Macoun's report: "The number of 'so called starving pups must also have been greatly overestimated in 1896. One of the effects of the *uncinaria* is to give the pups upon which it is preying a woe-begone listless look that has hitherto been assumed by everyone—myself included"—to be a sure sign of starvation."

Canada has never contended that pelagic sealing may not have been one of the causes of the death of pups, only that it has not been the main cause of death, or as has been so persistently contended by the United States government, the sole cause.

Let us consider the effect of these discoveries. We find admittedly, say 11,000 dead pups upon the islands from one known cause, whose mothers need no longer remain there for the purpose of looking after their young. Hence, we could have at sea a corresponding number, 11,000 females with milk, to all appearances nursing mothers, every individual of which might be killed by the pelagic sealers without involving the loss of a single pup upon the islands.

It has been time and again asserted by the United States that female seals killed at sea were either pregnant or nursing, the former on the coast and the latter in Behring Sea. It is now admitted, however, that there are included not only these

classes but also young seals that are not pregnant and others that have not yet brought forth young, with such others also as have lost their young through the various causes of natural mortality.

Contrasting this fact with the attitude of the United States, that every female seal in milk found at sea necessarily left an unprotected pup to starve upon the islands, shows the fallacy of the position so untiringly maintained throughout the diplomatic correspondence.

THE CONFERENCE OF FUR-SEAL EXPERTS.

During the presence in England of the Canadian Premier and the Minister of Marine and Fisheries last summer, the United States Seal Commissioner, Hon. John W. Foster, proposed to Her Majesty's government a conference of the fur-seal experts for the purpose of reaching some common conclusion as to the actual present condition of the seal herd upon the Pribylov Islands.

The Canadian representatives, to whom the proposition was referred, recorded their assent to a conference in effect as follows:—

The proposal was understood to be that a conference or meeting should be had at Washington during the autumn, between representatives of the governments of Her Majesty, the United States and Canada, which conference or meeting should also be attended by the several experts then engaged in making observations and collecting facts with respect to seal life in Behring Sea and the Pribylov Islands. The object of the conference or meeting would be to collate the facts and observations gathered by the experts, with a view, if possible, of arriving at correct conclusions respecting the numbers, condition and habits of the seal herd frequenting the Pribylov Islands at the present time, and as compared with the several seasons since the Paris Award.

It was believed that such a meeting or conference might result in great good. Personal interviews and discussions between the experts would probably result in, at least, an agreement upon the main facts which the respective governments were desirous of ascertaining. The understanding, of course, being that such a meeting or conference would not in any way be authorized to alter or modify the existing regulations under which the sealing industry was being carried on; but regulations could be more intelligently discussed afterwards by the several governments interested, in the light of the facts collected by the experts and collated at the proposed meeting.

This was followed by an agreement between the governments of Great Britain and the United States, which was communicated by the Marquis of Salisbury in a note to the United States Ambassador at the Court of St. James, in the following language:—

In the last paragraph of the despatch addressed to you by Mr. Sherman under date of the 16th May last, and communicated by you to me on the 22nd of that month, a wish is expressed for a conference of the Powers interested in the fur-seal fishery of the North Pacific.

In reply, I have to state that Her Majesty's government are willing to agree to a meeting of experts nominated by Great Britain and Canada and by the United States, in October next, when the further investigations to be made on the islands during the present season will have been completed. *The object of the meeting would be, to arrive, if possible, at correct conclusions respecting the numbers, conditions and habits of the seals frequenting the Pribylov Islands at the present time as compared with the several seasons previous and subsequent to the Paris Award.*

It seems to Her Majesty's government that Washington would be the most suitable place for such a meeting.

Efforts were made by the United States government to induce Her Majesty's government to include Russia and Japan in the conference as interested nations, but after considerable correspondence on the subject, Her Majesty's government adhered to the terms of the general agreement, which in no way contemplated the inclusion of nations other than those having direct interest in the Pribylov Islands, and it was not apparent what useful purpose could be served by the participation of Russia and Japan in a meeting of experts appointed to consider the state of the seal herd frequenting them.

If therefore transpired that the final agreement confined the conference to representatives of Great Britain, Canada and the United States, the object and scope of the meeting being formally and expressly defined in language italicized in the above quotation from Lord Salisbury's note.

Failing to arrange a conference of broader scope, the United States government participated in a separate meeting with Russia and Japan touching the sealing question just previous to the one above explained. The conclusions reached, however, have not been communicated to the Canadian government, neither Great Britain nor Canada taking any actual interest therein.

The conference between Great Britain and the United States met at Washington on the 10th November, 1897, the delegates being:

On the part of Great Britain, Professor D'Arcy Wentworth Thompson.

On the part of Canada, James Melville Macoun.

On the part of the United States, Hon. Charles Sumner Hamlin and Dr. David Starr Jordan.

Mr. C. F. Frederick Adam, representing Her Majesty's Embassy, Hon. Sir Louis H. Davies, representing Canada, and Hon. John W. Foster, representing the United States, attended the meeting.

The conference was concluded on the 17th November, 1897, after a "Joint statement of conclusions respecting the fur-seal herd frequenting the Pribilof Islands and Behring Sea" had been formally agreed to and signed by the several delegates.

The text of the finding of the experts is as follows:—

Joint Statement of Conclusions Respecting the Fur Seal Herd Frequenting the Pribilof Islands in Behring Sea.

The undersigned, duly empowered delegates, engaged during recent years in the investigation of the condition and habits of the fur seal herd frequenting the Pribilof Islands in Behring Sea, viz.:—

On behalf of Great Britain—D'Arcy Wentworth Thompson;

On behalf of Canada—James Melville Macoun,

On behalf of the United States—Charles Sumner Hamlin and David Starr Jordan;

Have met in conference under instructions from our respective governments. Under these instructions we were directed:

"To arrive, if possible, at correct conclusions respecting the numbers, conditions and habits of the seals frequenting the Pribilof Islands at the present time as compared with the several seasons previous and subsequent to the Paris Award."

As a result of such conference, now completed, we, the above-named Charles Sumner Hamlin, David Starr Jordan, D'Arcy Wentworth Thompson, and James Melville Macoun, find ourselves in accord on the propositions contained in the following joint statement of conclusions respecting the fur seal herd frequenting the Pribilof Islands, and make this our report.

JOINT STATEMENT.

1. There is adequate evidence that, since the year 1884, and down to the date of the inspection of the rookeries in 1897, the fur seal herd of the Pribilof Islands, as measured on either the hauling grounds or breeding or breeding grounds, has declined in numbers at a rate varying from year to year.

2. In the absence for the earlier years of actual counts of the rookeries such as have been made in recent years, the best approximate measure of decline now available is found in these facts:

(a) About 100,000 male seals of recognized killable age were obtained from the hauling grounds each year from 1871 to 1889. The table of statistics given in appendix I shows, on the whole, a progressive increase in the number of hauling grounds driven and in the number of drives made, as well as a retardation of the date at which the quota was attained during a number of years previous to 1889.

(b) In the year 1896, 28,964 killable seals were taken after continuing the driving till 27th July, and in 1897, 19,189 after continuing the driving till 11th August.* We have no reason to believe that during the period 1896 and 1897 a very much larger number of males of recognized killable age could have been taken on the hauling grounds.

The reduction between the years 1896 and 1897 in the number of killable seals taken, while an indication of decrease in the breeding herd, can not be taken as an actual measure of such decrease. A number of other factors must be taken into consideration, and the real measure of decrease must be sought in more pertinent statistics drawn from the breeding rookeries themselves.

3. From these data it is plain that the former yield of the hauling grounds of the Pribilof Islands was from three to five times as great as in the years 1896 and 1897, and the same diminution to one-third or one-fifth of the former product may be assumed when we include also the results of hunting at sea.

4. The death rate among the young fur seals, especially among the pups, is very great. While the loss among the pups prior to their departure from the islands has been found in the last two

* The nominal quota of 30,000 for 1896 and of 20,890 for 1897 included food skins taken in the fall of 1895 and 1896.

years to approach 20 per cent of the whole number born, and though the rate of subsequent mortality is unknown, we may gather from the number which return each year that from one-half to two-thirds have perished before the age of three years—that is to say, the killable age for the males and the breeding age for the females.

5. The chief natural† causes of death among the pups, so far as known at present, are as follows, the importance of each being variable and more or less uncertain :

(a) Ravages of the parasitic worm, *Uncinaria*, most destructive on sandy breeding areas and during the period from 15th July to 20th August.

(b) Trampling by fighting bulls or by moving bulls and cows, a source of loss greatest among very young pups.*

(c) Starvation of pups strayed or separated from their mothers when very young or whose mothers have died from natural causes.

(d) The ravages of the great killer (*Orca*), known to be fatal to many of the young and perhaps also to older seals.

At a later period drowning in the storms of winter is believed, but not certainly known, to be a cause of death among the older pups.

6. Counts of certain rookeries, with partial counts and estimates of others, show that the number of breeding females bearing pups on St. Paul and St. George was, in 1896 and 1897, between 160,000 and 130,000, more nearly approaching the higher figure in 1896 and the lower in 1897. **

7. On certain rookeries, where pups were counted in both seasons, 16,241 being found in 1896, and 14,318 in 1897, or, applying a count adopted by Professor Thompson, 14,743 in the latter year, there is evident a decrease of 9 or 12 per cent within the twelve month in question. The count of pups is the most trustworthy measure of numerical variation in the herd. The counts of harems, and especially of cows present, are much inferior in value. The latter counts, however, point in the same direction. The harems on all the rookeries were counted in both seasons. In 1896 there were 4,932; in 1897 there were 4,418, a decrease of 10·41 per cent. The cows actually present on certain rookeries at the height of the season were counted in both seasons. Where 10,198 were found in 1896, 7,307 were found in 1897, a decrease of 28·34 per cent.†

8. It is not easy to apply the various counts in the form of a general average to all the rookeries of the islands. We recognize that a notable decrease has been suffered by the herd during the twelvemonth 1896 to 1897, without attempting, save by setting the above numbers on record, to ascribe to the decrease more precise figures.

9. The methods of driving and killing practised on the islands, as they have come under our observation during the past two years, call for no criticism or objection. An adequate supply of bulls is present on the rookeries; the number of older bachelors rejected in the drives during the period in question is such as to safeguard in the immediate future a similarly adequate supply; the breeding bulls, females, and pups on the breeding rookeries are not disturbed; there is no evidence or sign of impairment by driving of the virility of males; the operations of driving and killing are conducted skilfully and without inhumanity.

10. The pelagic industry is conducted in an orderly manner and in a spirit of acquiescence in the limitations imposed by the law.

11. Pelagic sealing involves the killing of males and females alike, without discrimination and in proportion as the two sexes coexist in the sea. The reduction of males effected on the islands causes an enhanced proportion of females to be found in the pelagic catch; hence this proportion, if it vary from no other cause, varies at least with the catch upon the islands. In 1895, Mr. A. B. Alexander, on behalf of the Government of the United States, found 62·3 per cent of females in the catch of the *Dora Sieverd* in Behring Sea, and in 1896, Mr. Andrew Halkett, on behalf of the Canadian Government, found 84·2 in the catch of the same schooner in the same sea. There are no doubt instances, especially in the season of migration and on the course of the migrating herds, of catches containing a very different proportion of the two sexes.

12. The large proportion of females in the pelagic catch includes not only adult females that are both nursing and pregnant, but also young seals that are not pregnant and others that have not yet brought forth young, with such also as have recently lost their young through the various causes of natural mortality.††

† That is to say, not including losses ensuing from the killing of mothers at sea.

The number of dead pups counted on the rookeries between 8th August and 14th, in 1896, was 11,045. It is recognized that this number is an underestimate, inasmuch as a greater number must have been overlooked than were counted twice. It is also recognized that the great majority of these pups died from the attacks of the worm *Uncinaria*.

* The importance of this source of loss we now find to be much less than was supposed to be the case from the investigations made in 1896. (See Reports for 1896, Jordan, p. 45; Thompson, p. 20; Macoun, MSS.)

** For detailed account of the census of 1896, see Jordan, Preliminary Report for 1896, p. 15; Thompson, Report for 1896, p. 19; Macoun, Report, 1896, MSS. For a discussion of suggested corrections to the census of 1896, Jordan, Final Report, 1897. For details of the census of 1897, see Thompson, Report, 1897; Macoun, Report 1897; Jordan, Report, 1897. A correction to be made in the census of 1896 arises from the agreed assumption that the total number of breeding females was 1·75 times the number seen in the height of the season. Later observations show that the actual total is at least twice the maximum number ever seen at once on a rookery.

† The extreme irregularity of the number of cows present on the rookeries from day to day, and the consequent invalidity of any comparison of their number, is shown by the counts made on Lukanin and Kitovi rookeries during the season of 1897. See Appendix II.

†† Statements on which to base an estimate of the relative numbers of these several classes are necessarily incomplete, but the following notes may serve as a partial guide:

Townsend, Report 1895, pp. 46, 47.
Alexander, Report 1895, pp. 142, 143.
Macoun, Report 1897, MSS.
Lucas, Report 1897, MSS.

13. The polygamous habit of the animal, coupled with an equal birth rate of the two sexes permits a large number of males to be removed with impunity from the herd, while, as with other animals, any similar abstraction of females checks or lessens the herd's increase, or, when carried further, brings about an actual diminution of the herd. It is equally plain that a certain number of females may be killed without involving the actual diminution of the herd, if the number killed do not exceed the annual increment of the breeding herd, taking into consideration the annual losses by death through old age and through incidents at sea.

14. While whether from a consideration of the birth rate or from an inspection of the visible effects, it is manifest that the take of females in recent years has been so far in excess of the natural increment as to lead to a reduction of the herd in the degree related above, yet the ratio of the pelagic catch of one year to that of the following has fallen off more rapidly than the ratio of the breeding herd of one year to the breeding herd of the next.†

15. In this greater reduction of the pelagic catch, compared with the gradual decrease of the herd, there is a tendency toward equilibrium, or a stage at which the numbers of the breeding herd would neither increase nor decrease. In considering the probable size of the herd in the immediate future, there remains to be estimated the additional factor of decline resulting from reductions in the number of surviving pups caused by the larger pelagic catch of 1894 and 1895.

16. The diminution of the herd is yet far from a stage which involves or threatens the actual extermination of the species, so long as it is protected in its haunts on land. It is not possible during the continuance of the conservative methods at present in force upon the islands, with the further safeguard of the protected zone at sea, that any pelagic killing should accomplish this final end. There is evidence, however, that in its present condition the herd yields an inconsiderable return either to the lessees of the islands or to the owners of the pelagic fleet.

D'ARCY WENTWORTH THOMPSON,
JAMES MELVILLE MACOUN,
CHARLES SUMNER HAMLIN,
DAVID STARR JORDAN.

† The catch of the pelagic fleet, Canadian and American, in 1897 in Bering Sea, was 16,657 seals. In the summer of 1896 it was 29,500. The aggregate catch which directly influenced the herd of 1897 was 38,922, a number made up by adding to the summer's catch of 1896 the north-west coast catch in the spring of 1897. Up to the present time, accordingly, the pelagic catch already taken (16,657) and operating directly against next year's supply is 57.22 per cent less than the pelagic catch which operated against the supply of 1897 (see, also, Appendix I); or, if compare merely the summer catches, inasmuch as the possible spring catch of 1898 is an unknown factor, we have a reduction of 43.46 per cent.

APPENDIX I.

Statistics regarding land and sea killing, 1871-1897.

Year.	Date quota filled. (a.)	Hauling grounds driven. (a.)	Number of drives. (a.)	Killed on land. (b.)	Killed at sea.
1871.....	July 28.....	46	43	102,960	16,911
1872.....	25.....	43	30	108,819	5,336
1873.....	24.....	51	37	109,177	5,229
1874.....	17.....	61	41	110,585	5,873
1875.....	16.....	55	37	106,460	5,033
1876.....	Aug. 1 (c.)...	36	30	94,657	5,515
1877.....	July 14.....	44	32	84,310	5,210
1878.....	18.....	54	35	109,323	5,544
1879.....	16.....	71	36	110,411	8,557
1880.....	17.....	78	38	105,718	8,418
1881.....	20.....	99	34	105,063	10,382
1882.....	20.....	86	36	99,812	15,551
1883.....	19.....	81	39	79,509	16,557
1884.....	21.....	101	42	105,434	16,971
1885.....	27.....	106	63	105,024	23,040
1886.....	26.....	117	74	104,521	28,494
1887.....	24.....	101	66	105,760	30,628
1888.....	27.....	102	73	103,304	26,189
1889.....	31.....	110	74	102,617	29,858
1890.....	20 (d.)...	87	55	28,059	40,814
1891.....	.....	(e.)	(e.)	12,040	59,568
1892.....	.....	(e.)	(e.)	7,511	46,642
1893.....	.....	(e.)	(e.)	7,396	30,812
1894.....	Aug. 4.....	.....	.....	16,270	61,838
1895.....	July 27.....	.....	.....	14,846	56,291
1896.....	27.....	31	21	28,964	43,917
1897.....	Aug. 7.....	42	27	20,890	(f.) 25,079

(a.) These figures refers to the hauling grounds of St. Paul.

(b.) These totals include all males killed for any purpose on the islands.

(c.) In 1876 the killing was begun at an unusual date, said to be on account of an exceptionally late season.

(d.) Closed by order of the agent in charge.

(e.) Years of the modus vivendi.

(f.) As reported to date,

APPENDIX II.

Record of arrival of cows.*

Date.	Cows present.	Date.	Cows present.
<i>Amphitheatre of Kitovi.</i>		<i>Record of harems—Continued.</i>	
June 12	0	July 13	46
13	0	25	53
14	2	<i>Lukanin rookery.</i>	
15	3	June 12	1
16	3	13	1
17	4	14	3
18	6	15	5
19	7	16	6
20	8	17	11
21	9	18	19
22	23	19	25
23	37	20	37
24	45	21	52
25	56	22	74
26	76	23	103
27	105	24	131
28	137	25	176
29	168	26	207
30	210	27	257
July 1	246	28	
2	290	29	
3	362	30	635
4	414	July 1	
5	499	2	890
6	518	3	938
7	550	4	1,088
8	585	5	1,197
9	+587	6	1,264
10	660	7	1,371
11	703	8	1,531
12		9	+1,541
13	654	10	1,680
14	556	11	1,755
15	703	12	
16	678	13	1,736
17	698	15	1,841
18	566	14†	306
19	556	15	327
20	429	16	325
21	528	17	338
22	416	18	228
23	469	19	290
24	465	20	214
25	426	21	215
26	463	22	219
27	406	23	212
28	304	24	196
29	414	25	186
30	427	26	148
31	375	27	157
<i>Record of harems.</i>		28	177
June 14	1	29	149
20	3	30	127
30	10	31	124
July 8	35		

* Weather clear; no storms or surf—except one day when rain fell, causing a larger number of cows to take to the water and making it difficult to distinguish those present from the rocks.

† Rain.

‡ After July 14, it became impossible, on account of the scattering of the cows, to continue the count for the entire rookery without too great loss of time, and so a section of 18 harems was singled out and the count continued on it.

Immediately following the finding of the experts, a meeting of the diplomatic and executive representatives of the three governments took place to discuss the broader question of executive action in connection with the Behring Sea seal question, together with the possible adjustment of certain other important questions pending between Canada and the United States in connection with fisheries, reciprocal immigration, commercial reciprocity, etc.

This meeting concluded without any definite result in the direction of immediate action, and although the proceedings were not made public, the propositions as submitted by the representatives on the part of the United States were published in the press in the following form :—

At a conference, November 16th, with Sir Wilfrid Laurier, Sir Louis Davies and Mr. Adam, of the British Embassy, Mr. Foster (for the United States) proposed :

First. That the governments of Great Britain and the United States agree at once to a *modus vivendi* providing for a complete suspension of the killing of seals in all the waters of the Pacific Ocean and Behring Sea, for one year from December 31, 1897, and for suspension of all killing of seals on the Pribylov Islands for the same period.

Second. That the British Ambassador and one or more representatives of the Canadian government, on the one part, and such representative or representatives as may be designated by the President of the United States, on the other part, shall, with as little delay as possible, take up for consideration, with a view to settlement by means of treaty stipulations, the fur-seal question, the protection of fish in the waters of rivers and lakes contiguous to the United States and Canada, the subject of reciprocal immigration, commercial reciprocity, or any other unsettled question between the United States and Canada, which either of the governments may see proper to bring forward.

On the return of the Canadian representatives certain correspondence was exchanged between them and the United States negotiators, the principal communications have just been published in an executive document of the United States government, and may be included in this connection :

Sir Wilfrid Laurier to Mr. Foster.

PRIVY COUNCIL, CANADA, OTTAWA, 24th November, 1897.

DEAR MR. FOSTER,—Your memorandum embracing the substance of proposals made by you at a conference held between you and myself, Sir Louis Davies and Mr. Adam of the British Embassy, has been submitted by me since my return to Ottawa to my colleagues.

Your second proposition practically embodies the suggestions made by myself and my colleagues, and meets, I need hardly say, with the full approval of the Canadian government. Though the regulations prepared by the Paris tribunal for the killing of seals in Behring Sea and in the Pacific Ocean have been made revisable only at the end of five years, we are quite willing to enter at once and without waiting for the end of the period thus fixed, into an agreement to review the whole question for the object of settling by treaty stipulations, not that question alone but all others in which at present the relations between the two countries are not as satisfactory as they ought to be, viz : “The protection of fish in the waters of rivers and lakes contiguous to the United States and Canada, the subject of reciprocal immigration, commercial reciprocity, of any other unsettled question between the United States and Canada which either government may see proper to bring forward.”

This proposition, however, is made by you contingent upon and subject to the condition contained in the first : “That the governments of Great Britain and the United States agree at once to a ‘modus vivendi’ providing for complete suspension of the killing of seals in all the waters of the Pacific Ocean and Behring Sea for one year from December, 1897, and for a suspension of all killing of seals on the Pribyloff Islands for the same period.

There are difficulties in agreeing to that proposition, which I fear will be found insuperable.

Immediately on my return I requested my colleague, Sir Louis Davies, to obtain information as to the number of sealers who are fitting out for the coming year's operations and as to the approximate compensation it would be expected to be paid to them in case pelagic sealing was prohibited for a year.

The information furnished me is to the effect that the fleet is preparing as usual, that the prohibition of pelagic sealing for a year would practically destroy the business for several years, because the masters, the mates and white crews for the larger part, belonging to other parts of Canada would leave British Columbia. The sum which would likely be demanded as compensation is far beyond what it would be possible for us to induce parliament to vote even if we could recommend it.

Under these circumstances, and in view of the finding of the experts at the late conference, that in the greater reduction of the pelagic catch of late years, compared with the gradual decrease of the herd, there is a tendency towards equilibrium, or a stage at which the numbers of the breeding herd would neither increase nor decrease, and further that ‘the diminution of the herd is yet far from a stage which involves or threatens the actual extermination of the species so long as it is protected in

its haunts on land.' I am in hopes that you will agree to the proposition submitted at our verbal conference by Sir Louis Davies and myself and not press for the immediate suspension of pelagic sealing. The coast catch during the months of January, February, March and April, as gauged by the catches of the past few years, is very small. Last year the catch of the Canadian sealing fleet amounted only to six thousand one hundred, and in the year before, to eight thousand three hundred and fifty. If the fleet, therefore, are permitted to prosecute pelagic sealing for these four months, but little comparative harm would be done to the herd. Following these months is the close season, embracing May, June and July, during which, of course, no pelagic sealing can be carried on except on the Asiatic coast. It appears to me, therefore, highly probable that the joint commission suggested could finally conclude its labours long before the time when, under the Paris regulations pelagic sealing could begin in Behring Sea.

If that commission reached a satisfactory conclusion, and the Congress of the United States approved of it, there would be no difficulty in obtaining the necessary imperial legislation to carry out whatever recommendations might be agreed to which respect to the suspension or cessation of pelagic sealing in time to prevent the prosecution of the business in Behring Sea next year.

It is obvious, however, that any conclusion which might be reached by the joint commission must, to be effective, be ratified by Congress as well as by imperial legislation, and unless the session of Congress which opens in the coming month of December and closes, I understand, about the 4th of March, ratifies any treaty which might be agreed to before its termination, it would necessarily lie over for another year.

This would involve the renewal of the suspension for a second year, with a further claim for compensation on the part of the sealers. I would also more strongly urge upon you the view here presented, because pelagic sealing being at present a legitimate business carried on under the sanction of the Paris regulations cannot be stopped until the imperial parliament has enacted the necessary legislation prohibiting it, and as that parliament will not meet until early in February next it seems obvious that such legislation could not be hoped for until, at any rate, late in the month of February. At that date, the result of the labours of the joint commission, if it was constituted at an early day, would be known and could be submitted for approval at the coming session of Congress.

Under all these circumstances, therefore, we do not see how it is possible to agree to the suggested suspension, but we see no reason to doubt, if the appointment of a joint commission results in the submission of a treaty which Congress would ratify, the necessary imperial legislation could be procured in time to carry out its recommendations will regard to Behring Sea sealing before the close season ends and pelagic sealing begins and so attain the object you have in view.

Yours respectfully,

WILFRID LAURIER.

Mr. Foster to Sir Wilfrid Laurier.

DEPARTMENT OF STATE, WASHINGTON, December 2, 1897.

DEAR SIR WILFRID,—I received, on the 30th ultimo, through the British embassy, your letter of the 24th ult., in which you kindly communicate your answer to the proposition which I submitted in the conference which I had the pleasure to hold with you, your colleague and Mr. Adam, of the British embassy, on the 16th ultimo.

Your answer is in effect a declination of my proposition, and a renewal of the proposal made in the conference by Sir Louis Davies, and which at the time I stated my government could not accept.

The considerations in support of your colleague's proposal, re-stated by you, have been submitted to the President, and he directs me to express his regret that they are not of such a nature as to justify him in reversing the position taken by me in our conference.

You intimate that if pelagic sealing is continued during the earlier months of the year the catch would not exceed 6,000, which you think would do little harm to the herd. This might be the case if it were in its normal condition, but such a catch now would be approximately equal to 30,000 in normal times, and in its present depleted condition would create a serious inroad on the herd. The state of "equilibrium" contemplated by the experts to which you refer was at a still more depleted stage than even now exists. It is admitted that the industry is at present unprofitable for both the lessees and the pelagic sealers. Should the herd reach the "equilibrium" pointed out by you it will have passed the period when negotiations will be of any avail.

But in addition to the injury that a continuance of early pelagic sealing will do to the herd, it will also entail on the United States the heavy expense of patrol during the entire summer, even though a settlement should be reached, as you think possible, before August, as the Victoria fleet will be at sea, an expense which for the past four years has averaged about \$150,000 annually.

As to your statement that the imperial parliament will not convene till February, we should be quite willing to have the proposed suspension of sealing take effect at such a date in February as would enable the necessary legislation to be passed provided a *modus vivendi* could be signed at once. Such an arrangement, would, it is believed, obviate the general difficulty to which you refer.

There is no disposition on our part to embarrass the Dominion government by asking impossible or unreasonable conditions. This is the more apparent when I recall the fact that four years ago when the Paris tribunal rendered its award, that body, in view of the critical condition to which the herd was then reduced, recommended the two governments to suspend the killing of seals for a period of two or three years. If such a measure was called for then, how much more reasonable is the request for a single season's suspension now, after four more years of disastrous slaughter of female seals during which period the experts agree the herd has steadily declined.

Your frank courteous letter reveals the fact, to which I had occasion to refer during your recent friendly visit to this city and which constitutes a serious obstacle to our negotiations. We seem to have failed to impress upon the Canadian government, past or present, our view that pelagic sealing ought to be voluntarily given up because it is unneighbourly in that it is destroying a valuable industry of our government, and inhumane because it is exterminating a noble race of animals useful to the world. We paid Russia a large sum for Alaska and the chief prospective return then visible was the seal industry, which had yielded the Russian government and subjects large profit. We enjoyed the industry undisturbed for about fifteen years reaping a rich return to the government and the lessees, the estimated revenue to the federal treasury up to 1891 being over \$11,000,000, a sum much larger than was paid to Russia for the entire territory. Suddenly the pelagic sealers entered upon the work of destruction and they have brought the industry to the point when it is no longer profitable. This work of destruction has been prosecuted as a conceded legal avocation, and when we have called attention to the rapid diminution of the herd and the treaty obligation to protect and preserve it we have been met by the declaration that its actual extermination is not immediately threatened. When it is proposed to negotiate for the surrender of the legal right of pelagic sealing we are told that this cannot be brought about by a fair compensation to those engaged in the industry, but that the question must be included with a number of other subjects having no relation to it whatever and that it must await the fate of all these matters, some of which, as commercial reciprocity and the tariff, are very complex in their character, and others, as the north eastern sea fisheries, of long standing and very difficult of adjustment.

Notwithstanding the President feels that the subject of the proper protection of the seals should not be complicated with other questions of intricate public policy and conflicting interests, in his earnest desire to promote a more friendly state of relations between the two neighboring countries, he has consented that all those questions should be embraced in one series of negotiations if meanwhile a *modus vivendi* could be agreed upon which would save the seals from destruction while the negotiations were in progress.

You have been misinformed as to the duration of coming congress and it will continue beyond the fourth of March next without constitutional limitation. But it could hardly be anticipated that the subjects which you desire to have considered would be adjusted by treaty stipulations and the necessary resulting legislation enacted, with the despatch indicated in your letter, even with the most friendly spirit of conciliation. The variety of questions to be considered and the interests to be consulted would compel deliberation in the negotiations and might create discussion before legislation could be secured.

I have explained at some length the reasons which control the President in adhering to the position which, under his instructions, I assumed during our informal conference because of my earnest wish to have you understand that we are greatly desirous of bringing about a better understanding with your government. I am extremely sorry and greatly disappointed that your visit to Washington gives so little promise of satisfactory results, but I entertain the hope that it may yet bear good fruits.

I remain, etc.,

Yours very truly,

JOHN W. FOSTER.

DIPLOMATIC CORRESPONDENCE.

During the year, considerable diplomatic correspondence occurred between Her Majesty's government and that of the United States, the two most important communications being that from the United States Secretary of State Sherman to the Ambassador at the Court of St. James, dated 10th May, and the reply thereto from the Foreign Office to the Colonial Office, dated 26th July, 1897.

These communications appear in the Papers presented to the Imperial Houses of Parliament in September, 1897, United States, No. 4, 1897 (C. 8662), and for convenience and general information are here reproduced:—

Mr. Sherman to Mr. Hay.—(Communicated by Mr. Hay, May 22.)

DEPARTMENT OF STATE, WASHINGTON, May 10, 1897.

SIR,—The British Ambassador called upon me on the 3rd instant and handed me a copy of a despatch to him from Her Majesty's Principal Secretary of State for Foreign Affairs, bearing date the 21st ultimo. This despatch constitutes the reply of the British Government to the proposals of

the President, as presented in the note of your Embassy of the 10th ultimo, for a *modus vivendi* for the suspension of all killing of seals for the present season, and for a joint Conference of the Powers concerned with a view to the necessary measures being adopted for the preservation of the fur-seal in the North Pacific. It will be seen that both proposals are rejected.

I need hardly say that the President is greatly disappointed at this action, especially when it is based upon such unsubstantial and inadequate reasons. The President's concern, in view of the depleted condition of the seal herd, was occasioned not alone from an examination of Dr. Jordan's Report of 1896 and what he had reason to suppose were the conclusions of Professor Thompson, but it was based upon a series of observations and statistics covering a much longer period than that treated by those gentlemen, establishing a state of facts beyond refutation, and which is in part set forth in my note to the British Ambassador of the same date as my cablegram to you. It is therefore quite surprising that Her Majesty's Secretary should base his rejection of the proposals of this Government, so impressively presented, upon the Report of one scientist whose facts and conclusions are incorrectly apprehended and the delayed Report of another, which is for the first time made public concurrently with the receipt of his Lordship's note.

It would have been gratifying to me and useful to my Government, in studying the important subject under consideration, if Professor Thompson's Report could have been made public with the promptness which marked the appearance of that of Dr. Jordan. In that case there would have been ample time for both Governments to have examined the Reports of these two eminent scientists before the opening of another sealing season. But it seems to have better suited the purposes of Her Majesty's Government to withhold Professor Thompson's Report until an opportunity was afforded to examine that of Dr. Jordan, and thus enable the former to pass the latter in review, criticize its statements, and as far as possible minimize its conclusions. It is not pleasant to have to state that the impartial character which it has been the custom to attribute to the reports of naturalists of high standing has been greatly impaired by the apparent subjection of this Report to the political exigencies of the situation. It is further to be regretted that the Report was so long delayed that no opportunity was afforded this Government to examine it before the definite and final rejection of the President's proposals, based mainly upon its conclusions, was communicated to me. This conduct recalls the incident which preceded the Arbitration at Paris, and which came near rendering that Arbitration abortive, when a similar Report of a British Commission was withheld until after the Case of each Government was exchanged and the Report of the American Commission made public.

Lord Salisbury asserts that Dr. Jordan's Report does not contain any facts warranting the statement that there is a "depleted condition and prospective early extinction of the herd." The note of your Embassy of the 10th ultimo does not attribute such a statement to Dr. Jordan, but it is difficult to understand how any one can read his Report without reaching the conclusion that such is the real condition of the herd. On p. 18 he says: "From this time (1886) on the decline has been more rapid and has been continuous." On p. 21 he clearly recognizes diminution, as evidenced by photographs, as also by decrease of harems. On p. 66 he uses this expression: "As the herd is steadily diminishing the spring or north-west catch is becoming relatively unimportant." Other citations might be made, but it would seem unnecessary in view of his declarations, often repeated in his Report, respecting pelagic sealing, from which I give only one extract (p. 29): "Pelagic sealing, in the judgment of the members of the present Commission, has been the sole cause of the continued decline of the fur-seal herds. It is at present the sole obstacle to their restoration, and the sole limit of their indefinite increase. It is therefore evident that no settlement of the fur-seal question as regards either the American or Russian islands can be permanent unless it shall provide for the cessation of the indiscriminate killing of fur-seals, both on the sealing grounds and on their migrations. There can be no 'open season' for the killing of females if the herd is to be kept intact."

Professor Thompson's Report is plainly written with a view to minimize as far as possible the depleted condition of the herd on the Pribyloff Islands, and requires a critical examination not possible within the limits of the present instruction, but its general purport may be briefly stated. It is to be regretted that he should have contracted his study far within the purview of his instructions. In the outset of his Report he says: "The main object of my mission was the collection of information and statistics with regard to the working and effectiveness of the Regulations" of the Paris Tribunal. But we look in vain in his Report for any discussion of that all-important subject. He confined his inquiry and Report to the subordinate subject of the number of seals resorting to the islands, and particularly to the relative numbers in 1895 and 1896. The result of his observations and inquiry seemed to be that on some rookeries there was an increase and on others a decrease, but on the whole a possible state of equilibrium for the past two years, although he concedes a diminution as compared with 1892. If all the Professor claims is admitted, it does not militate against the contention that since pelagic sealing became general the decline of the herd has been steady and rapid. The apparent equilibrium noted in his Report is well explained by Dr. Jordan when he says (p. 18): "There is evidence that the *modus vivendi* of 1892-93, by which Behring Sea was closed to the sealing fleet, has produced for 1895 and 1896 a slight check of the diminution. The reason for this is that, in addition to the saving of mothers, no pups were starved to death in 1892 and 1893, and those which might have been starved have returned as breeders or as killable seals in 1895 and 1896." Since the receipt of Lord Salisbury's despatch explicit inquiry has been made of Dr. Jordan as to the relative condition of the herd in 1895 and 1896 and in previous years, and he has furnished the chapter on the "Decline of the Herd" from the forthcoming Final Report of himself and associates, from which the following extract is taken: "While the amount of the decline cannot be stated with mathematical exactness, it is possible from the data at hand to make an approximate estimate. From a careful study of all the conditions, in our opinion the fur-seal herd of the Pribyloff Islands

has decreased to about one-fifth its size in 1872-74; to somewhat less than one-half its size in 1890, and that between the seasons of 1895 and 1896 there has been a decrease of about 10 per cent."

Although Professor Thompson has been very careful throughout the Report to say nothing likely to embarrass his Government, in the "conclusions" the voice of the true scientific investigator speaks in firm and certain tones. While he regards "the alarming statements of the herd's immense decrease" as overdrawn, he says "there is still abundant need for care and for prudent measures of conservation in the interest of all It is not difficult to believe that the margin of safety is a narrow one, if it be not already in some measure overstepped. We may hope for a perpetuation of the present numbers, we cannot count upon an increase. And it is my earnest hope that a recognition of mutual interests and a regard for the common advantage may suggest measures of prudence which shall keep the pursuit and slaughter of the animal within due and definite bounds." In view of such explicit language it is not easy to understand how Lord Salisbury can reconcile his refusal to entertain the proposals of the President with the interests of his own countrymen, to say nothing of the friendly relations which he desires to maintain with the United States, Russia, and Japan.

The experience had with the scientific Commissions of 1892, as well as the Reports of 1896 just under review, shows that it is difficult through them to reach a harmony of views; but we have at hand certain statistics of undisputed authority pointing unmistakably to conclusions which should be controlling.

The operations of the pelagic fleet in Behring Sea since the Paris Regulations have been in force are as follows:—

1894—37 vessels, 31,585 seals taken, or an average of 853 per vessel.

1895—59 vessels, 44,169 seals taken, or an average of 748 per vessel.

1896—67 vessels, 29,500 seals taken, or an average of 440 per vessel.

It thus appears that nearly double the number of vessels in 1896 were not able to take as many seals as were taken in 1894, and the catch per vessel fell off nearly one-half. Lord Salisbury attributes this large falling-off in Behring Sea "to the stormy weather prevailing," but does not cite his authority. I am not aware of any published report to that effect. Captain Hooper, who commanded the American cruising fleet in Behring Sea in 1895 and 1896, reports: "The weather in Behring Sea was not materially different in the past two years. Conditions admitted of boarding operations by the fleet twenty-five days in 1895 and twenty-four days in 1896." An examination and comparison of the logs of sealing-vessels for 1895 and 1896 confirm Captain Hooper's report. The above figures, with the statistics contained in my note of the 9th ultimo to the British Ambassador, make it very clear that the seal herd is becoming rapidly depleted, and that "the margin of safety," as Professor Thompson expresses it, has been "already overstepped." It is to be inferred that "the margin of safety" is intended to signify the point at which pelagic sealing ceases to be profitable. He cannot have had in mind biological extermination, for that point could not have been reached so long as a single bull and harem existed. The point when sealing ceased to be profitable seems to have been reached during last year. A Table appended to his Report shows that the total product of the pelagic catch of 1896 in the London market was about half the amount of that of 1895, and Lord Salisbury informs us that this result has "brought many owners of the sealing-vessels to the verge of bankruptcy." It thus appears that the condition of things predicted by the Government of the United States, as quoted below, has already come to pass—the commercial extermination of the seals. If pelagic sealing continues to be tolerated a limited number of vessels will carry on the indiscriminate slaughter, in the hope, by a favourable cruise, of recouping the losses of the previous year, and the rookeries on the islands will be still further depleted. But the biological existence of the fur-seal may still be continued, and Her Majesty's Ambassador may repeat the declaration, so often made during the past two years, that there is "no reason to fear that the seal herd is threatened with early extermination."

In this connection it may not be unprofitable to recall the action of the two Governments respecting the efforts made to revise the Regulations adopted at Paris. The expressed object of the Paris Arbitration was "the preservation of the fur-seals," and the Regulations adopted by the Tribunal were framed with a view to "the proper protection and preservation of the fur-seal resorting to Behring Sea." On the 23rd January, 1895, Secretary Gresham addressed a note to the British Ambassador, stating that the first year's experience had "convinced the President that the Regulations enacted by the Paris Tribunal have not operated to protect the seal herd from the destruction which they were designed to prevent," and he asked that a Commission of scientists and experts be appointed by the Governments of the United States, Great Britain, Russia, and Japan to report upon the proper measures to be adopted, and pending the deliberations of the Governments a *modus vivendi* be agreed upon suspending sealing in Behring Sea. Nearly four months elapsed without an answer from the British Government, when, on the 14th (? 10) May, 1895, a second note was sent, reiterating the President's solicitude, urging a reply, and predicting that unless some further restrictions were adopted the seals would "be exterminated for all commercial purposes within a very few years." On the 27th May, the British answer was received, in which it was complacently stated "that the condition of affairs is not of so urgent a character as the President has been led to believe," and that there was no "such urgent danger of total extinction of the seals as to call for a departure from the arbitral Award by which the two nations have solemnly bound themselves to abide."

Secretary Olney, 24th June, 1895, by direction of the President, renewed the proposition in different terms, but the British Government repeated its declination to make "any extension of the Regulations solemnly laid down by an International Board of Arbitration."

After a second year's experience of the Regulations, Secretary Olney, 11th March, 1896, called the attention of the British Ambassador to the catch of 1895 in Behring Sea (the largest ever made in that sea), and expressed the hope that the British Government would realize "the absolute necessity of consenting for the coming season to some further Regulation . . . to the end that the valuable herd be saved from total extinction." On the 27th April, Sir Julian Pauncefote replied that Her Majesty's Government saw no reason to believe the catch in Behring Sea was "so large as to threaten early extermination," and that there was no "necessity for the immediate imposition of increased restrictions."

This correspondence is recalled to show that, from the first year the Paris Regulations were put in force, each succeeding President and Secretary of State has been firmly convinced that they were inadequate for the purpose for which they were adopted, and that the British Government has just as firmly resisted all overtures for even a conference of the Governments concerned for the purpose of considering whether further Regulations were required to protect the seals, and has rested its refusal upon "the Arbitral Award by which the two nations have solemnly bound themselves to abide."

In view of this attitude of the British Government, I deem it opportune to make an examination (even at the risk of being somewhat tedious) into the manner in which it has responded to the action of the Paris Tribunal, and to what extent and in what spirit it has observed the decision and recommendations of that Tribunal.

A perusal of the Protocols of that Tribunal will show that the preparation of the Regulations was intrusted to three Arbitrators nominated by the neutral Governments, and when their unanimous Report was presented it was provided in Article II that the Regulations should be applied to all the waters of the Pacific Ocean and Behring Sea north of the 35th degree of north latitude, thereby including all the waters east of Japanese and Russian territory. Lord Hannen, the British Arbitrator, objected to this provision, and moved an amendment limiting the area to all that part of the ocean and sea east of the 180th meridian. Baron Courcel, President of the Tribunal, stated on behalf the neutral Arbitrators that, in framing Article II, "they had acted out of regard for Russia and Japan, Powers not represented before the Tribunal of Arbitration, and towards the waters of whom it appeared not equitable to drive back the English and American pelagic sealers during the whole time of the close season." But he acquiesced in Lord Hannen's amendment, and it was adopted. (Protocol LIV.) It is plain from the proceedings that the Tribunal regarded the extension of the Regulations to the Asiatic waters as a matter of justice to Russia and Japan, and they would have been so extended if those Powers had been parties to the Arbitration.

When, in accordance with Article VII of the Treaty of 1892, the Russian and Japanese Governments were approached with a view to securing their adhesion to the Regulations, they both replied they could only do so on their extension to the Asiatic waters. Secretary Gresham reports that as early as October, 1893, he verbally brought this attitude of the subject to the attention of the British Ambassador, who recognized the force of the position assumed, and said the situation seemed to suggest the propriety of a Treaty between the four Powers "for the preservation, for their common benefit, of the fur-seals between the two continents and north of the 35th degree of north latitude."

Mr. Bayard was instructed, 27th October and 20th November, 1893, to seek to bring about such an arrangement or Treaty; 23rd January, 1894, Mr. Gresham brought the subject to the attention of the British Ambassador, and on the 2nd May, no answer being received, the proposition was again urged. Secretary Olney brought the subject again to the attention of the British Government in a note dated the 24th June, 1895, the proposition being presented in a new form; and on the 19th August a general negative reply was made to Mr. Olney's note.

Under date of the 2nd April, 1896, Secretary Olney informed Mr. Bayard that the Russian Government was about to initiate negotiations at London for the extension of the Paris Regulations over the Asiatic waters, and at the request of the Government Mr. Bayard was instructed to co-operate in such negotiations. Mr. Bayard at once put himself in communication with the Russian Ambassador, but on the 14th May he was informed by Lord Salisbury that Her Majesty's Government had decided to dispatch a naturalist to the Russian seal islands, and that, pending the receipt of his Report, his Government would not enter upon negotiations. The British Naturalist returned to London in October, 1896, but up to this date, His Lordship has given no indications of a desire or intention to upon the negotiations. In fact, the despatch to which I now reply rejects the proposition of the President for a similar Conference or negotiation. The effect of Lord Hannen's amendment of Article II of the Regulations has been to bring about the state of affairs which the neutral Arbitrators desired to avoid—to wit, to transfer the sealing-vessels to the Asiatic waters during the closed season in the American waters, which they expected would be prevented by negotiations between the interested Governments. Such negotiations Great Britain has steadily omitted and declined to enter upon.

Again, the Arbitrators appended to their decision or Award a series of declarations, not binding upon the contracting Governments, but which were recommended for their adoption. The American Arbitrators at once accepted the declarations, but Lord Hannen hesitated to accept the second paragraph, which is as follows:—

"In view of the critical condition to which it appears certain that the race of fur-seals is now reduced in consequence of circumstances not fully known, the Arbitrators think fit to recommend both Governments to come to an understanding in order to prohibit any killing of fur-seals, either on land or sea, for a period of two or three years, or at least one year, subject to such exceptions as the two Governments might think proper to admit of.

"Such a measure might be resorted to at occasional intervals if found beneficial."

Lord Hannen declared that, "although approving the spirit in which it (the second paragraph) is conceived, and although regarding as very desirable that the destruction of the fur-seals might be entirely suspended during a certain period of time, so as to enable nature to retrieve the losses which this race of animals has undergone, he does not feel authorized by the terms of his mandate to express an opinion on the subject;" and the Canadian Arbitrator concurred with his British colleague. (Protocol LIV).

Immediately after the receipt of the official copy of the Award and declarations, the 12th September, 1893, Secretary Gresham cabled instructions to Mr. Bayard to ask the concurrence of Great Britain in the enforcement of the second declaration. Mr. Bayard reported, the 13th September, that he had made known his instructions to the British Government. No answer having been received on this point, Secretary Gresham repeated the offer to Sir Julian Pauncefote, the 24th January, 1894. I do not find that response to this proposition was ever made. The wisdom of the recommendation is abundantly proved by the experience of the past three years, and it strongly supports the repeated applications which have been made by the Government of the United States for a *modus* suspending all killing of the seals until a Conference could be had to readjust the Paris Regulations.

The indifference with which the British Government treated the repeated appeals of this Government for prompt action towards the adoption of measures to enforce the Regulations "solemnly laid down by an International Board of Arbitration," illustrates the measure of respect entertained for that august Tribunal. On the 12th September, 1893, within a month after the Award had been rendered, Secretary Gresham instructed Mr. Bayard by cable (cited above) to inform the British Government of the desire of the Government of the United States to take up without delay the subject of the enforcement of the Regulations, so as to make them effective before the next sealing season. This notice was given to the British Foreign Office on the 13th September, more than three months before the opening of the sealing season. No progress having been made, the 17th November, Secretary Gresham cabled Mr. Bayard that the President was anxious that an agreement of this subject should speedily be reached. On the 4th December, Secretary Gresham consented, at the desire of the British Government, that the negotiations might be transferred to Washington, but he gave notice to Lord Rosebery that "the rapidly shortening interval before the next season will commence admonishes both Governments to expedite the negotiations." On the 24th January, 1894, the Secretary addressed an urgent note to the British Ambassador, complaining that nothing had yet been accomplished, and the time lost had brought them "to the opening of another sealing season without any definite steps having been taken for the execution of the Paris Award." A month later, the 22nd February, the Secretary cabled Mr. Bayard that, in answer to his repeated inquiries, the British Ambassador informed him he was still without instructions, and he was directed to say "this long delay is difficult to understand, and it is the President's desire that you represent the matter impressively to Her Majesty's Government. On the 17th March Secretary Gresham sent another urgent cablegram to Mr. Bayard, complaining of still further delay, for which "this Government is not responsible," and which was threatening to "become embarrassing for both Governments." The negotiations were not entered upon until six months after they were invited by the United States; the British Act (the 23rd April, 1894) to enforce the Regulations was not passed until four months after the sealing season had opened, and the final Order in Council (the 27th June, 1894) on the subject was not issued until six months after the sealing fleet had put to sea in disregard of the Award of the Tribunal.

The manner in which the British Government has discharged its police duties under the Award is in marked contrast with its appeal for a strict observance of the five years period of the Regulations. An equal obligation rests upon each Government to patrol the waters embraced in the Award area, in order to see that the Regulations are not violated by the sealing-vessels. In 1894, the Government of the United States furnished twelve vessels for the patrolling fleet at great expense, and only one vessel was furnished by the British Government. In 1895, five United States vessels patrolled the Award area and only two British vessels, one for a short time only in Behring Sea, and the other took no part whatever in the patrol, as its presence was almost constantly required in Unalaska Harbour to take over the British sealing-vessels seized in Behring Sea. Owing to the repeated complaints of the Government of the United States as to the inadequacy of the British patrol, an additional cruiser was ordered into Behring Sea during the season of 1896, although it was stated by the British Government that, "so far as they have been able to judge, the force employed up to the present time has been sufficient." As it is shown that practically no patrol service had been rendered in Behring Sea by the British cruisers during the previous year, the inference from this language would seem to be that Her Majesty's Government understood that the American cruisers only were to perform the patrol duty, and the British cruisers to take over and act upon the validity of seizure of British vessels.

The detailed enforcement of the Regulations has further developed on the part of the British Government a strange misconception of the true spirit and intent of the Arbitrators. Under Article 6 of the Regulations the use of fire-arms in Behring Sea was prohibited, and to enforce that prohibition it was agreed between the two Governments for the year 1894 that sealing-vessels might have their arms and ammunition placed under seal. But on the 11th May, 1895, although this Government had every reason to believe from the Order in Council that the British Government had given its concurrence to the arrangement, the British Ambassador gave notice that his Government would not renew the arrangement as to the sealing of arms for the coming season, and defended its action on the ground that the possession of arms, &c., by a sealing-vessel was "not forbidden by the Award Regulations."

This tardy action of the British Government in refusing to renew the arrangement of 1894 led to much trouble and inconvenience in connection with the patrol of Behring Sea. The British Government made grievous complaint against the severe measures of search resorted to by the American cruisers, which gave rise to a lengthy correspondence. On the 2nd July, 1896, Secretary Olney submitted a proposition to put an end to the controversy by an examination of vessels entering Behring Sea, and an inspection by a Representative of the United States at British Columbian ports of all skins taken in Behring Sea, to discover whether or not fire-arms were used; but this proposition was not accepted. A further attempt was made by Secretary Olney to procure some agreement for the season of 1897, when it was urged that American vessels frequenting Behring Sea were required to have their arms sealed, and on returning to their home ports their skins were carefully inspected, while Her Majesty's Government refuses to enforce the provision as to arms, and declines the inspection of skins—measures which this Government regards as “absolutely essential for preventing the unlawful destruction of the seals.” Nevertheless, another season has been entered upon without any settlement of this vexed question.

In this connection, I recall the serious defect pointed out in the correspondence, in the British Act for the enforcement of the Regulations. Under the British Act passed to carry out the *modus vivendi* of 1891, whereby all killing of seals was prohibited in Behring Sea, it was provided that the presumption of guilt would lie against the vessel “having on board fishing or shooting implements or seal skins.” A provision of a kindred nature was inserted in the British Act for the enforcement of the Russian *modus* of 1893. The Act of Congress of 1894 to enforce the Regulations of the Paris Award contained a similar provision; but the British Act of 1894 for the same purpose contained no provision whatever as to presumptive guilt respecting the possession of fire-arms or skins at forbidden times or in forbidden waters. And to emphasize its purpose in the matter, when the British Act to enforce the Russian agreement was re-enacted in 1895, the provisions of the Act of 1893 as to presumptive illegality was omitted. This action of the British Government was made the subject of an earnest protest on the part of my predecessor, but to no purpose. The practical effect is to make it impossible in many cases to convict British sealing-vessels, although there may be the strongest presumptive evidence of guilt, evidence which, under the Act of Congress, would in most cases procure the conviction of an American sealing-vessel.

I shall only cite one further instance of the failure and refusal of the British Government to give full effect to the Paris Regulations. Article 5 provided that the vessels engaged in sealing should enter daily in their official log-books the number and sex of the seals taken and that these entries should be communicated by each Government to the other at the end of each season. This Regulation was prescribed in order to procure reliable statistics as to the proportion of female seals killed, but it was found to be unsatisfactory and imperfect in its practical operation. The catch of American vessels was subjected to an official inspection at the home port, and it was found that they reported a much greater proportion of females seals taken than the British sealers. Although in many instances the British sealers were close to the American sealers, yet the American sealers reported from two to five times as many females as males, a result entirely at variance with the British returns. This state of facts led the Acting Secretary of State, the 10th May, 1895, to request of the British Government their consent to the stationing of United States inspectors at British Columbian ports for the purpose of verifying the log entries of British sealing-vessels, with the offer of a reciprocal privilege in American ports to British inspectors. No answer having been received, on the 13th September, and again on the 18th September, the request made in the previous May was renewed. On the 24th of September the British Ambassador replied that the request for inspectors was not acceptable to Her Majesty's Government, “on the ground that the matter is already provided for by the Award Regulations, the sealers bring bound themselves to keep a record of sex.”

The measure was regarded by this Government as so important that on the 15th December, 1896, Secretary Olney recalled it to the attention of the British Ambassador, in connection with the sealing of arms. The answer of the British Government to this second application was that “the compulsory examination by experts of skins on landing at British ports would require legislation in Canada,” and that the views of the Canadian Government would have to be ascertained. In answer to the inquiry of Secretary Olney on the 23rd January, 1897, as to when the Canadian Government was likely to take action, the Ambassador replied on the 24th March, but Her Majesty's Government were “still in correspondence with the Canadian Government” and that a further communication would be made as soon as possible. No further communication has been made.

I regret that this statement has become so lengthy, but in view of the fact that the British Government, when pressed for a remedy to well-established defects in the Regulations or the Acts and Rules agreed upon for their enforcement, has appealed to “the Arbitral Award which the two nations have solemnly bound themselves to abide.” I have felt the present occasion opportune to make a review of the events which have transpired since that Award was rendered, and to challenge a comparison of the conduct of the two Governments with regard to the final action of the International Tribunal of Arbitration. In no respect has the United States Government failed to observe the exact terms of the Award or to accept its recommendations in their true spirit and full effect, even though the have entailed heavy expense and caused great damage to long-established interests of this nation.

On the other hand, I think I have shown that the British Government has from the beginning and continuously failed to respect the real intent and spirit of the Tribunal or the obligations imposed by it. This is shown by the refusal to extend the Regulations to the Asiatic waters; by the failure to put in operation the recommendations for a suspension of the killing of the seals for three, for two, or even for one year; by the neglect to put the Regulations in force until long after the first sealing had been entered on; by the almost total evasion of the patrol duty; by the opposition to

suitable measures for the enforcement of the prohibition against fire-arms; by the omission to enact legislation necessary to secure conviction of the guilty; and by the refusal to allow or provide for an inspection of skins in the interest of an honest observance of the Regulations.

The obligations of an international Award, which are equally imposed on both parties to its terms, cannot properly be assumed or laid aside by one of the parties only at its pleasure. Such an Award which in its practical operation is binding only on one party in its obligations and burdens, and to be enjoyed mainly by the other party in its benefits, is an Award which, in the interest of public morality and good conscience, should not be maintained. Having in view the expressed object of the Arbitration at Paris and the declared purpose of the Arbitrators in prescribing the Regulations, when it became apparent, as it did after the first year's operation of them and with increased emphasis each succeeding year, that the Regulations were inadequate for the purpose, it was the plain duty of the British Government to acquiesce in the request of that of the United States for a Conference to determine what further measures were necessary to secure the end had in view by the Arbitration.

A course so persistently followed for the past three years has practically accomplished the commercial extermination of the fur-seals and brought to nought the patient labours and well-meant conclusions of the Tribunal of Arbitration. Upon Great Britain must therefore rest, in the public conscience of mankind, the responsibility for the embarrassment in the relations of the two nations which must result from such conduct. One of the evil results is already indicated in the growing conviction of our people that the refusal of the British Government to carry out the recommendations of that Tribunal will needlessly sacrifice an important interest of the United States. This is shown by the proposition seriously made in Congress to abandon negotiations and destroy the seals on the islands, as the speedy end to a dangerous controversy, although such a measure has not been entertained by this Department. We have felt assured that as it has been demonstrated that the practice to pelagic sealing, if continued, will not only bring itself to an end, but will work the destruction of a great interest of a friendly nation, Her Majesty's Government would desist from an act so suicidal and so unneighbourly, and which certainly could not command the approval of its own people.

The President therefore cherishes the hope that, even at this late day, the British Government may yet yield to his continued desire, so often expressed, for a Conference of the interested Powers; and, in delivering to Lord Salisbury a copy of this instruction, you will state to him that the President will hail with great satisfaction any indication on the part of Her Majesty's Government of a disposition to agree upon such a Conference.

Respectfully yours,

(Signed.) JOHN SHERMAN.

Colonial Office to Foreign Office.—(Received July 26.)

DOWNING STREET, JULY 26, 1897.

SIR,—I am directed by Mr. Secretary Chamberlain to acquaint you, for the information of the Marquess of Salisbury, that he has had under his consideration the despatch from Mr. Secretary Sherman to Mr. Hay respecting the seal fishery.

After an expression of disappointment and surprise at Her Majesty's Government having rejected the proposals made by the Government of the United States, Mr. Sherman proceeds to comment on the delay which occurred in the publication of Professor D'Arcy Thompson's Report. He says (paragraph 3):

"It would have been gratifying to me and useful to my Government, in studying the important subject under consideration, if Professor Thompson's Report could have been made public with the promptness which marked the appearance of that of Dr. Jordan. In that case there would have been ample time for both Governments to have examined the Reports of these two eminent scientists before the opening of another sealing season. But it seems to have better suited the purposes of Her Majesty's Government to withhold Professor Thompson's Report until an opportunity was afforded to examine that of Dr. Jordan, and thus enable the former to pass the latter in review, criticize its statements, and as far as possible minimize its conclusions. It is not pleasant to have to state that the impartial character which it has been the custom to attribute to the reports of naturalists of high standing has been greatly impaired by the apparent subjection of this Report to the political exigencies of the situation. It is further to be regretted that the Report was so long delayed that no opportunity was afforded this Government to examine it before the definite and final rejection of the President's proposals, based mainly upon its conclusions, was communicated to me. This conduct recalls the incident which preceded the arbitration at Paris, and which came near rendering the arbitration abortive, when a similar Report of a British Commission was withheld until after the case of each Government was exchanged and the Report of the American Commission made public."

Again (paragraph 5):—

"Professor Thompson's Report is plainly written with a view to minimize as far as possible the depleted condition of the herd on the Pribyloff Islands;" and (paragraph 6) "although Professor Thompson has been very careful throughout the Report to say nothing likely to embarrass his Government."

The reasons for the delay in the preparation and publication of Professor Thompson's Report were given in Lord Salisbury's despatch to Sir J. Pauncefote of the 7th May. Those explanations cannot, however, have been before Mr. Sherman when he permitted the insertion of the above-quoted

statements in his despatch, and Mr. Chamberlain would not refer to this point, although so prominently put forward, if he did not feel it necessary for the vindication of Professor Thompson's high character and reputation to declare that the allegations made against him are totally unfounded, and therefore equally unjustifiable. Turning to the practical issues raised in Mr. Sherman's despatch, I am to point out that he is mistaken in assuming that Her Majesty's Government attributed to Dr. Jordan the statement that there is a "depleted condition and prospective early extinction of the herd." The words in question were used in Mr. Sherman's note to which Her Majesty's Government were replying, and they must adhere to their opinion that the statement is not warranted by any facts contained in the Report.

The passages cited from that paper are merely expressions of opinion, and the grounds upon which such opinions are based are not set forth in the report, and the passage on p. 21, where it is asserted, "he clearly recognizes diminution, as evidenced by photographs, as also by decrease of harems," must be read with his statement that "there is no assurance that photographs taken the same date on successive years show the same or relative conditions, as the arrival of the seals, and doubtless their movements on the rookeries, are affected by the state of the weather and the advancement of the season."

The statement quoted from Dr. Jordan's final report with which Her Majesty's Government have not yet been furnished, is interesting. It says:—

"From a careful study of all the conditions, in our opinion the fur-seal herd on the Pribyloff Islands has decreased to about one-fifth of its size in 1872-74, to somewhat less than half its size in 1890, and that between the seasons of 1895 and 1896 there has been a decrease of about 10 per cent."

On p. 22 of his preliminary report, Dr. Jordan estimates the seal-herd in 1896 as consisting of "143,071 breeding females, or a total number of about 440,000 of seals of all grades," and he adds, "there may have been, in 1896, 155,000 breeding seals, or a total of 475,000." Dr. Jordan's matured reflections therefore, on the comparative state of the herd, have apparently led him to consider that the loss during the period 1895-96 was not $7\frac{1}{2}$ per cent. as he thought in November last, but "about 10 per cent."

In the passage referred to on p. 22, he only carries his comparison back to 1880, when he estimates the herd at "600,000 breeding females, 1,500,000 of all grades," but he has now apparently carried his comparison further back, and estimates that in 1872-74 the herd was about five times its present size. This would mean that at that period the herd numbered 700,000 breeding females, and 2,200,000 seals of all grades collectively, and Her Majesty's Government will await with interest his explanation of the disappearance of 100,000 breeding females and 700,000 seals of all grades in the period between 1872-74 and 1880, when pelagic sealing had not yet begun. Mr. Chamberlain is not aware that it has ever previously been admitted that there was a decrease in the herd between 1872-74 and 1880, and apparently Dr. Jordan himself was not aware of it when he wrote his preliminary Report, as on p. 17 of that paper, he states that "until 1872, and perhaps a few years after, the herd continued to increase. During the period 1872 to 1878, it doubtless remained practically in a state of equilibrium under the various checks acting upon it, of which the trampling of pups was the chief. The North-west catch, which remained stationary at about 5,000 during those years, being another element of check." Whether the earlier or later views of Dr. Jordan are to be taken as expressing his final opinion, the discrepancy shows the difficulty attending the discussion of the question in consequence of the absence of any really trustworthy data on which comparisons of the size of the herd at different periods can be based, and justifies the action of Her Majesty's Government in refusing to be drawn into a discussion of the question until further information has been acquired.

Mr. Sherman again refers to the falling-off in the pelagic catch last year in Behring Sea in support of the contention that the herd has declined, and cites the figures of the catch for 1894, 1895, and 1896, from which it would appear that the catch per vessel in 1896, had fallen off nearly one-half as compared with 1894.

The catch of 1894 was altogether exceptional, as will be seen from the Table printed at p. 198 of the Report of the Secretary of the United States' Treasury for 1895, and exceeded that of any previous year, as well as that of the subsequent years, and the extraordinary variations in the catch from year to year which characterize the industry, render it impossible to deduce from the average catch per vessel in any year any safe conclusion as to the state of the herd.

Mr. Sherman questions the assertion that the falling-off in last season's catch was partly due to stormy weather, and cites Captain Hooper's statement that boarding operations were possible during twenty-four days in 1896, as compared with twenty-five in 1895, a statement which Her Majesty's Government have no reason to doubt, though it does not follow that sealing operations in canoes are practicable whenever boarding is practicable, still less that the weather is favourable for sealing, and as Lord Salisbury is aware, Admiral Palliser, in his Report on the season, described the weather as "exceptionally bad." It is unnecessary to elaborate this point further than to add that Her Majesty's Government might equally well maintain from a comparison of the results of the North-west coast catch in 1895 and 1896, that seals were more numerous in the latter year.

The number of seals is limited, and it is impossible, therefore, that the catch per vessel should remain the same while the number of vessels engaging in it has almost doubled. The presence of a greater number of vessels must necessarily interfere to some extent with each other's operations, and moreover the constant patrolling of the limited area of the fishery by steam-vessels must tend to disturb the seals and diminish the catch, which in Behring Sea is made almost entirely from sleeping seals, even if the constantly repeated boarding to which the British vessels have been subjected had

not constituted a material hindrance to the operations of the sealing fleet. The extent to which British sealing-vessels have been unnecessarily harassed by the United States patrol-vessels during 1895 and 1896 may be judged from the fact that in 1894, when the British sealing fleet numbered only twenty-two vessels, thirty-six boarding operations were performed, an average of one and a-half per vessel, while in 1895, when a fleet of forty British vessels was engaged, the number of boardings rose to 183, an average of four and a-half per vessel, and in 1896 the British fleet of fifty-seven vessels was subjected in Behring Sea alone to 171 boardings by the United States patrol, an average of three times per vessel. It is interesting to note that in 1895 seventy-six United States' vessels were subjected to only 156 boarding operations. If it is borne in mind that at each boarding operation by United States vessels the whole catch is pulled out of the salt in which it is packed, and each skin carefully examined, and then left to be resalted and repacked by the crew of the sealing-vessel, some idea may be formed of the extent to which the operations of the sealing fleet are subjected to active obstruction, in addition to the loss caused through the effect of the constant movements of the steam patrol-vessels in scaring the seals. In addition, most of the vessels were boarded one or more times by Her Majesty's ships. It is necessary here to note that, in his efforts to prove the approaching commercial extermination of the fur-seal, Mr. Sherman has, unintentionally, no doubt, by quoting without reference to its context a passage from Lord Salisbury's despatch of the 21st April, placed upon it a construction which is not borne out by its language.

He says :—

"A Table appended to his Report shows that the total product of the pelagic catch¹ of 1896 in the London market was about half the amount of that of 1895, and Lord Salisbury informs us that this result has 'brought many owners of the sealing-vessels to the verge of bankruptcy.'"

What Lord Salisbury did actually say was that "the small catch and low prices obtained for the skins last year brought many of the owners of the sealing-vessels to the verge of bankruptcy."

It is perhaps unnecessary to dwell further on this part of Mr. Sherman's despatch, as it has been answered by anticipation in Lord Salisbury's despatch, of the 7th May, to which no reply has been received, but in view of the fact that Mr. Sherman speaks throughout as if pelagic sealing were the sole cause of the alleged depletion of the herd, it may be well to again call attention to the conclusion there drawn from Dr. Jordan's estimates of the herd at different periods, viz., that the decline of the herd was much more extensive before pelagic sealing became general than it has been since.

Mr. Chamberlain cannot pass without notice the attack upon Her Majesty's Government for declining to consider an immediate revision of the Fishery Regulations established by the Arbitration Tribunal at Paris in 1893, as this attack forms so considerable a portion of the despatch, that silence might be construed by the United States' Government as an admission that Mr. Sherman's observations cannot be answered.

The expressed object of the arbitration was "the preservation of the fur-seals," and the Regulations adopted were framed with a view to "proper protection and preservation of the fur-seal.... resorting to Behring Sea."

From a perusal of this despatch of the 10th May it might be inferred that the "proper protection and preservation of the fur-seal" is identical with the suppression of pelagic sealing, and this view is consistent with the attitude maintained by the United States' Government from the outset.

In support of their views the United States' Government have departed from the noblest traditions of their country which had earned universal honour by their efforts to vindicate the freedom of the high seas.

The nation which is now so zealous for prohibiting the killing of seals on the high seas was, in 1832, with equal zeal asserting a claim of right for its citizens not only to kill seals on the high seas, but to land and slaughter them on the shores of a friendly nation. The Power which now reproaches Her Majesty's Government with "unneighbourly" conduct because they decline to abolish an industry the lawfulness of which has never been questioned except by the United States, and has, only four years since, been vindicated by the highest international Tribunal, did not shrink in 1832, when the United States sealing-vessel "Harriet" had been seized for violating the territory of the Republic of Buenos Ayres in the pursuit of fur-seals, from landing an armed party at Soledad and carrying off the crew and cargo of the vessel, and from declaring that the seal fishery on those coasts was in future to be free to all Americans, and that the capture of any vessel of the United States would be regarded as an act of piracy.

The shores of the Pribyloff are to-day just as much uninhabited as were the shores of the Falkland Islands and Tierra del Fuego fifty years ago, but no British subject has ever claimed the right to land and kill seals there as the United States' citizens did on the South Atlantic under the protection of the guns of a United States' man-of-war.

British subjects, and Her Majesty's Government for them, have only claimed the right of every subject of a free State to exercise their undoubted right of fishery on the high seas; yet, while exercising that right, British subjects have been seized, fined, and imprisoned, in the face of the protests of Her Majesty's Government. And now, after Her Majesty's Government, in their desire for an amicable arrangement with the United States, had agreed to submit to arbitration their claim to exercise a right never before disputed, and to leave to the Tribunal to determine when that right had been vindicated, under what restrictions it should, in the interests of both countries, continue to be exercised, and after they have ever since scrupulously adhered to those restrictions, they find themselves, notwithstanding these concessions and sacrifices, accused of unneighbourly conduct.

When the Award was made it was welcomed in the United States because it was believed that the restrictions were sufficient to render pelagic sealing unprofitable, and that the interests of the lessees of the Pribyloff Islands would not under the new condition of affairs be materially or injuriously affected.

When it was discovered from the results of the first year's fishery that the Regulations, severely as they pressed on the British industry, were not sufficient to destroy it, the United States Government began to press Her Majesty's Government to agree to revise the Regulations. The same arguments as had just before been urged in vain upon the Tribunal were repeated. Pelagic sealing it was declared was suicidal, and the extermination of the fur-seal was imminent. Her Majesty's Government refused to agree to set aside an Award arrived at after the most careful deliberation by the Tribunal, merely because it was found that British subjects could, under the restrictions imposed by it still continue to prosecute their industry successfully.

The agitation and pressure were continued, and exaggerated statements as to the condition of the head were circulated, till, when Her Majesty's Government sent their Agents to inquire into the actual facts in 1896, it was found that, in spite of the large catch of 1895, the herd actually numbered more than twice as many cows* as it had been officially asserted to contain in 1895. The result of these investigations, as pointed out in Lord Salisbury's despatch of the 7th May, has further been to show that pelagic sealing is much less injurious than the practice pursued by the United States lessees of killing on land every male whose skin was worth taking. If the seal herd to-day is, as Professor Jordan estimates, but one-fifth of what it was in 1872-74, that result must be, in great measure, due to the fact that, while the islands were under the control of Russia that Power was satisfied with an average catch of 33,000 seals, subsequently under the United States control more than three times that number have been taken every year, until the catch was perforce reduced because that number of males could no longer be found.

Last year while the United States Government were pressing Her Majesty's Government to place further restrictions on pelagic sealing they found it possible to kill 30,000 seals on the islands, of which Professor Jordan says, p. 21, 22,000 were to the best of his information 3-year olds, though p. 17 he estimated the total number of 3-year old males on the islands as 15,000 to 20,000. If such exhaustive slaughter is continued it will, in the light of the past history of the herd, very quickly bring about that commercial extermination which has been declared in the United States to be imminent every year for the last twelve years.

Enough has perhaps been said to justify the refusal of Her Majesty's Government to enter on a precipitate revision of the Regulations, and if further justification were required it is to be found in the nature of the industry as carried on by British subjects, especially if compared with the proceedings of United States citizens.

A large amount of British capital has been invested in ships specially fitted for the seal fishery, which cannot readily be turned to other uses, and much skill has been acquired by those employed on the vessels which is useless for other purposes, and Her Majesty's Government would require very complete justification before they could assent to measures which would render a large proportion of this capital and labour unprofitable. The United States industry is carried on on land, no capital is required except a small sum annually for the maintenance of the few Indians on the islands, whose principal sustenance is, in fact, seal's flesh, and for bringing the skins to market. A partial or total cessation of sealing is therefore a light matter to the United States citizens as compared with its result to British subjects.

The sealing industry, moreover, as carried on by British subjects is at best a highly speculative one. If by good fortune seals are met with in abundance and the weather is suitable it may prove highly remunerative, provided prices are good. But when the weather is bad, and seals are timid and prices at last year are low, heavy losses are incurred. To add to these risks uncertainty as to the conditions under which the industry may be carried on would be equivalent to putting an end to it altogether. Mr. Sherman's strictures on the conduct of Her Majesty's Government should be read in the light of these facts.

In further support of his indictment of Her Majesty's Government Mr. Sherman proceeds to review "the manner in which it (the British Government) has responded to the action of the Paris Tribunal, and to what extent and in what spirit it has observed the decision and recommendations of that Tribunal."

This review contains some signal omissions and also some inaccuracies to which attention must be called. Mr. Sherman begins by recalling the fact that when the draft Regulations were submitted to the Tribunal they provided that the Regulations should apply to all the waters of the Pacific Ocean to the north of the thirty-fifth degree of north latitude and that the late Lord Hannen objected to this provision, and moved an amendment limiting the area to that part of the ocean and sea east of the 180th meridian, and he cites part of the words used by the President of the Tribunal in acquiescing in the amendment, but omits the concluding portion which was "Nevertheless, as far as he was concerned he did not desire to do anything which might be prejudicial to the position of Great Britain or of the United States, in the negotiation which the Governments of these two countries might engage ultimately with Russia and Japan." Mr. Sherman also omits to mention that the amendment was unanimously agreed to. Lord Hannen's views on this point therefore, were equally shared by his United States colleagues on the Board.

Mr. Sherman continues: "When, in accordance with article VII of the treaty of 1892, the Russian and Japanese Governments were approached with a view to securing their adhesion to the regulations, they both replied they could only do so on their extension to the Asiatic waters," and when Secretary Gresham verbally in October, 1893, brought this view of the subject to the attention of the British Ambassador, he recognized the force of the position, and said the situation seemed to suggest the propriety of a treaty between the four powers "for the preservation, for their common

* The number of cows, according to the official estimate of the 1895, was 70,423; the count in 1896 showed 143,071 cows.

benefit of the fur seals between the two continents, and north of the 35th degree of north latitude." As a matter of fact the identic note to the Maritime Powers inviting their adhesion to the regulations was not dispatched till the 20th August, 1894.

In a despatch of the 26th October, 1893, however, Sir J. Pouncefote records a conversation with Mr. Gresham, in which he reports:—

"He (Mr. Gresham) took the opportunity of mentioning that the Russian and Japanese Governments would probably, as a condition of their adhesion to the regulations prescribed by the Award, insist that the southern limit laid down in Article 2 of the Regulations, namely, the 35th degree of north latitude should be extended as far as the Japanese coast, so as to protect the Russian and Japanese rookeries. Mr. Gresham was of opinion that it would be difficult to resist this demand on equitable grounds, it being based on reciprocity. In reply to his inquiry, I said that the contention might seem plausible enough, but I did not know how it would be viewed by Her Majesty's government. I understand that Mr. Bayard has been instructed to confer with your Lordship thereon."

There is thus a discrepancy between Mr. Gresham's report, as quoted by Mr. Sherman of the language used at this interview by Sir J. Pouncefote, and Sir J. Pouncefote's own report of the same interview.

However, this may be, and whatever instructions may have been sent to Mr. Bayard as to the interests of Russia and Japan, he apparently did not consider that he was desired to bring the question before Her Majesty's Government for his official note of the 20th November made no allusion to the subject, and that note, with the exception of a verbal communication on the 20th September, 1893, expressing the desire of his Government for prompt action in procuring legislation to give effect to the Award, and in securing the adhesion of other powers was the first communication received from him on the question of the Award.

No note from Mr. Gresham of the 23rd January, 1894, on the subject of the seal fishery appears to be on record, and the note of the 24th January, to which possibly Mr. Sherman alludes, contains no allusion to the subject of the Japanese and Russian fisheries, nor does any communication appear to have been made to Her Majesty's Government on the 2nd May, 1894, in reference to this question. Mr. Sherman appears to have been misinformed as to what actually took place in regard to this matter.

On the 11th March, 1894, Mr. Gresham, in the course of a discussion on the subject of the legislation proposed by the respective Governments for enforcing the Award, threw out a suggestion for a convention between the four powers principally interested, namely: Great Britain, the United States, Russia, and Japan, to embrace a complete scheme of regulations applicable not only to the high seas, but also within the sovereignty of each Power, and he coupled this with a proposal that meantime the *modus vivendi* established during the arbitration, should be renewed and extended over the whole area of the award. Such a *modus vivendi* would have practically prevented any pelagic sealing on the eastern side of the Pacific, and would have driven the whole body of pelagic sealers to the western side, the Japanese and Russian fisheries which Mr. Sherman now believes the United States Government were anxious to protect. Her Majesty's government replied, five days later, on the 16th March, that they saw no objection to the proposed negotiation between the four Powers, and were willing to renew the *modus vivendi* on the same terms as before, but could not consent to its extension. As the United States insisted on the extension, the proposal dropped for the time.

It is possible that Mr. Sherman may have had in mind the proposals made by Mr. Gresham, on the 23rd January, 1895, to which he previously referred. To that note, after communication with the Dominion Government, a reply was returned on the 17th May, which was received by the United States Government, as Mr. Sherman states in an earlier part of his despatch on the 27th May. That reply, to which Mr. Sherman refers as "complacently" stating "that the condition of affairs is not of so urgent a character as the President has been led to believe," and that there was no "such urgent danger of total extinction of the seals as to call for a departure from the Arbitral award by which the two nations have solemnly bound themselves to abide," contained a very full statement of the reasons for the belief expressed by Her Majesty's Government to which they have not yet had any reply, and Mr. Sherman omits to mention that alternative proposals were submitted for the prosecution of a joint inquiry into the facts, the necessity for which has been fully established by the results of last year's investigation. If that proposal of Her Majesty's Government had been promptly accepted, the first trustworthy information as to the state of the seal herd would have been available at the end of 1895 instead of at the end of 1896, and would have afforded, with the information collected in the latter year, some criterion of the progress or decline of the herd.

The reasons which induced Her Majesty's Government to decline to enter upon a joint negotiation with the three Powers interested in suppressing pelagic sealing were fully set forth in the correspondence, and it is unnecessary here to do more than call attention to the fact that since 1893 Great Britain has had an arrangement with Russia in regard to the seal fishery in which that Power is interested, and that, as the seal herds are generally alleged to be quite distinct and not to intermingle, no advantage would have been gained by a joint negotiation, which could only have been based upon incomplete knowledge of facts.

Mr. Sherman proceeds further to reflect upon the action of the late Lord Hannen and of Her Majesty's Government in regard to the second declaration annexed to the Award of the tribunal, which urged a suspension for a short period of any killing of seals either on land or sea. Mr. Sherman states that Mr. Gresham instructed Mr. Bayard on the 12th September, 1893, to ask the concurrence of Great Britain in the enforcement of this declaration, and that Mr. Bayard reported on the 13th September that he had made known his instructions to the British Government. Mr. Bayard must have failed to make his meaning clear, for Lord Rosebery's despatch of the 13th September to

Sir J. Pauncefote, recording his conversation with Mr. Bayard, speaks only of arrangements "for carrying into effect the Award of the Behring Sea Tribunal of Arbitration," and makes no reference to the second declaration annexed to the Award. On the 20th of the same month Mr. Bayard communicated a further instruction from his Government on the subject of the enforcement of the Award, but also without any reference to the declarations, as is also the case in the formal note addressed by Mr. Bayard to Lord Rosebery on the 20th November. The first reference to the subject is contained in Mr. Gresham's note to Sir J. Pauncefote of the 24th January, 1894, in which, after urging the early enforcement of the Regulations, he adds "the United States would be glad to prohibit entirely for a period of three years, or for two years, or for one year, the killing of seals, but unless Her Majesty's Government should be willing to agree to that measure it only remains for the two governments at once to give effect to the regulations determined upon by the tribunal as necessary in conformity with the treaty." In forwarding this note Sir J. Pauncefote observed that he had read this statement in Mr. Gresham's note with surprise, as it was inconsistent with his former language on the same subject at an interview on the 13th December, when, as reported by Sir J. Pauncefote in a despatch dated the 16th of that month, Mr. Gresham had stated "as regards the second declaration, respecting a further cessation of seal killing at sea and on land, Mr. Gresham stated that he was opposed to closing the industry during the coming season. Such a course would, he thought, raise a great outcry in this country, and, moreover, it was important to ascertain what had been the effect of the cessation of seal killing for two consecutive seasons in Behring Sea." This language, it need scarcely be observed, disproves Mr. Sherman's belief that the United States government had been urging Her Majesty's government to agree to the adoption of the second declaration from the moment they were informed of it. Moreover, it is to be observed that on the 24th January, 1894, when in the manner quoted, the suggestion to adopt the declaration was thrown out, it was too late, as the sealing fleet had already started for the spring fishery. Her Majesty's Government did not, however, as Mr. Sherman supposes, fail to respond, for in their reply, dated the 24th February, they stated with reference to the suggestion that they were willing to agree as a temporary measure to renew the *modus vivendi* for the continued closing of Behring Sea. This offer did not meet with the views of the United States.

Mr. Sherman's account of the action of Her Majesty's Government in regard to the adoption of measures for enforcing the regulations is also incomplete. In calling attention to the delay which took place in passing the legislation for giving effect to the award, he omits to mention that part of the delay was due to the difficulty caused by the desire of the United States Government to transfer the negotiations to London, although all the previous discussions in connection with the Behring Sea difficulties had been carried on at Washington, and Her Majesty's Ambassador there was fully informed on the whole question, and, further, that for some time the United States Government persisted in a desire to proceed to enforce the regulations by means of a convention instead of by legislation, a course which was impossible for this country, where treaties restricting or interfering in any way with the rights and liberties of the subject require the sanction given by express laws. The proposed legislation, too, mainly affected Her Majesty's subjects in Canada, and it was necessary therefore to refer constantly to the Dominion Government in the matter, and there was no undue delay on the part of Her Majesty's Government in dealing with it.

The British Act received the Royal assent on the 23rd April, 1894, just seventeen days after the United States' Act was passed; the Order in Council giving the necessary powers to United States' officers to act under the British Act was passed on the 30th April, and instructions were sent to Her Majesty's naval officers by telegraph the same evening, and the Act was thus brought into force before the beginning of the close time fixed by the Regulations. The statement in Mr. Sherman's despatch, therefore, that "the British Act to enforce the Regulations was not passed until four months after the sealing season had opened, and the final Order in Council (the 27th June, 1894) on the subject was not issued until six months after the sealing fleet had put to sea in disregard of the Award of the Tribunal" is misleading. The Regulations, except in so far as they prescribed a special flag for sealing vessels, and the making certain entries in the log and taking out a license, all made no change in regard to the methods of sealing during the spring. The legislation was passed in time to enforce the close season, and during the close season arrangements were completed with the United States in regard to the flags, &c., and it was to give effect to these arrangements that the second Order in Council, viz., that of the 27th June was passed, more than a month before the close season ended. It is difficult therefore to know what is exactly meant by saying that "the sealing fleet had put to sea in disregard of the Award of the Tribunal," unless it refers to the departure of the fleet for the coast fishery in which the Award makes practically no change.

In regard to the charge of neglect of the police duties under the Award, Mr. Chamberlain would observe that the sealing fleet consists entirely of small sailing-vessels. In 1894 forty-four were employed during the spring season, and thirty-seven in Behring Sea. In 1895 the number in the spring season was fifty-two, and in Behring Sea fifty-nine, and in 1896 the numbers were forty-three and sixty-seven respectively. The main duty of the patrol is to prevent infringement of the 60-mile zone in Behring Sea, and to prevent sealing during the close time, and even if the masters of the sealing-vessels were bent on evading the law, instead of being, as they are, most anxious to conform to it, Her Majesty's Government are satisfied that one man-of-war or revenue-cutter is quite equal to looking after eight small sailing-schooners.

Her Majesty's Government also send three vessels to patrol the western side of the Pacific to see to the enforcement of the arrangement with Russia, and though United States pelagic sealers equally engage in the fishery on that side, and United States have a similar arrangement in regard to it, Mr. Chamberlain has never heard of any United States vessel taking any part in the patrol on

that side, and Her Majesty's Government have, therefore, had employed in the patrol of the seal fisheries on one side of the Pacific or the other five or six men-of-war as a rule, as compared with five or six revenue-cutters on the part of the United States, and they have every reason to believe that this force is ample for the discharge of the proper duties of the patrol.

The "strange misconception of the true spirit and intent of the Arbitrators," said by Mr. Sherman to have been developed on the part of the British Government, has been entirely on the part of the United States—a misconception which Her Majesty's Government have frequently had to point out. The Agreement for allowing vessels to have their arms sealed up was not renewed, because, as Mr. Sherman was well aware, it was made a pretext by United States officers for the unwarrantable seizure of two British vessels. Moreover, Her Majesty's Government made provision for the examination of sealing-vessels before clearing for Behring Sea, and the issue to them of certificates by the Customs authorities, to the effect that they had no fire-arms on board. The United States' Government declined to accept these certificates and insisted that British sealing-vessels should undergo a further and, as might be expected, unsuccessful search at the hands of a United States' officer.

The United States Government can scarcely have seriously expected that Her Majesty's Government would consent to cast such a grave aspersion on the character of their officials. The Award, it must be remembered, is carried out, so far as British vessels are concerned, under a law of the Imperial Parliament, and Her Majesty's Government have accepted the assistance of United States commissioned officers in enforcing that law, but they have not conferred on them, nor did the Tribunal of Arbitration suggest that they should confer on them, the duty of supervising and controlling the action of British naval or customs officers appointed to that duty, and they are pleased to think that in spite of all the boarding and searching with which the British sealing fleet has been harassed, not a single instance has been established of the use of fire-arms by British vessels contrary to the Regulations.

The so-called serious defect in the British Act for the enforcement of the regulations is the next point in Mr. Sherman's indictment. He refers to the omission of the clause, contained in the Act passed to carry out the *modus vivendi* of 1891, which provided that the presumption of guilt would lie against the vessel having on board fishing or shooting implements, or seal-skins at forbidden times or in forbidden waters, and declares that "the practical effect is to make it impossible in many cases to convict British sealing-vessels, although there may be the strongest presumptive evidence of guilt, evidence which, under the Act of Congress, would in most cases procure the conviction of an American sealing-vessel."

It would have been of much assistance to Her Majesty's Government if Mr. Sherman had mentioned one or two of these cases, as only ten British vessels have been seized during the three years that the Act has been in force. Of these, two were seized in 1894, not for violation of the Award, but having unsealed arms on board, the alleged arms in one case being a musket with the barrel cut down, used for signalling to the vessel's boats. There was absolutely no evidence in either case that the arms had been used, and the Admiral decided not to bring vessels so improperly seized to trial. One vessel was seized last year by the United States on the pretext that there was a shot-hole in one of the skins, though the most exhaustive search failed to reveal any arms on board, and after a few days' detention the United States' officer in charge of the patrol released her. There remain only seven vessels, therefore, brought to trial in three years, and of these four have been convicted and heavy fines or forfeiture inflicted. The cases referred to by Mr. Sherman are therefore reduced to three. One of these vessels was seized on the ground that the master had not entered up in his log for two days the number of seals taken, and the Court promptly dismissed the case with costs against the prosecutor. The other vessel released had been seized on a charge of using fire-arms in killing seals in Behring Sea. Having been previously sealing on the Japan coast, where the use of fire-arms is allowed, on entering Behring Sea the master had his ammunition and arms carefully counted by the United States' officers at Attu before beginning sealing. When searched subsequently there appeared to be some discrepancy in the ammunition, and one skin had a hole in it presenting an appearance like that of a shot-hole. The discrepancy in the ammunition was fully accounted for, but the vessel was sent for trial, and of course acquitted. The third case of acquittal was somewhat similar to the last, except that the evidence was even less strong, and the Commander of the British patrol fleet only sent her for trial because his instructions gave him no discretion where a distinct offence is charged against a vessel by a United States' officer. It is implied that because the clause making the possession of sealing implements *prima facie* evidence justifying seizure appeared in the Act for the enforcement of the *modus vivendi* in 1891 it should also have appeared in the Act of 1894 for enforcing the Award. But the circumstance were completely altered. Under the *modus vivendi* Behring Sea was closed to sealing. If a vessel with sealing equipment was found within the well-defined limits of the sea, her presence raised the presumption that she was there for an unlawful purpose. The Award, on the other hand, established a close season over the whole area of the North Pacific east of 180° from the 1st May to the 1st August. When the close season begins the sealers have to find their way back to port through the closed area for hundreds of miles with their arms and skins on board. Before the season opens in Behring Sea they have again to find their way through the closed area with their equipment on board to be ready to begin operations as soon as the close time ends. If the clause were in the British Act every one of the vessels either going to or returning from the prosecution of their lawful fishery could be seized solely because of the possession of the implements and produce of her calling. It would be evidently unjust to enforce such a provision.

Even if the operation of the clause were restricted to the 60-mile zone in Behring Sea, it would obviously, with the fogs and currents there prevailing, when for days together it is impossible to get

a sight of the sun, be unjust to presume that whenever a sealing-vessel was found inside a geographical line which she may have had no opportunity of fixing, that she was necessarily there for an unlawful purpose. Such a measure would be contrary to the spirit of justice, and inflict unnecessary and unmerited hardships on a part of Her Majesty's subjects who are most anxious to observe the law in every particular.

The final instance cited by Mr. Sherman of "the failure and refusal" of the British Government to give full effect to the Paris Regulations," deals with the question of the entries required in the official log-books of the number and sex of the seals taken. He speaks of the "daily" entry, though the word does not appear in the Regulations, and complains that the Returns furnished by British sealing vessels are untrustworthy, and that Her Majesty's Government have refused to allow the catch of British sealing-vessels to be examined in Canadian ports by United States' Inspectors.

Mr. Sherman omits to mention the contention of Her Majesty's Government that the results of such inspection for the purpose of determining the sex of the seal from which the skin has been taken are at the best of very doubtful value, and that although in the case of males three years old or over, or of females which have borne young, it is possible to determine the sex from an examination of the skin with more or less accuracy, it is not possible to do so with any approach to certainty in the case of the skins of young males or females.

Mr. Sherman's charges are summed up in the final paragraphs of his despatch. They have been answered above in detail and it has been shown in regard to the alleged refusal to extend the Regulations to the Asiatic waters that Regulations believed at the time by Her Majesty's Government and the Government of Russia to be adequate in regard to these waters, have been in force there since 1893, and that when Russia in 1895 complained of their inadequacy, Her Majesty's Government took the first opportunity in 1896 of inquiring into the state of the herd on the Russian Islands, and are conducting fur investigation with the same object this year.

In regard to the refusal of Her Majesty's Government to agree to the total suspension of the killing of seals for a period of years, it has been shown that such a measure was in the first instance deprecated by the United States Government, and when it was brought up it was too late, though in any case Her Majesty's Government could not have agreed to such a measure, as it would have involved the ruin of an important British industry.

The alleged neglect to put the Regulations in force until after sealing had been entered upon has been answered by showing that all the substantive Regulations were enforced by the date fixed by the Tribunal.

The "evasion of the patrol duty" has been disposed of by showing that Her Majesty's Government have actually had a larger force engaged in patrolling the seal fisheries of the Pacific than the United States, and that the force is more than adequate for the purposes.

The "opposition to suitable measures for the enforcement of the prohibition against fire-arms" has been shown to be unfounded. The possession of fire-arms by a sealing-vessel is not in itself illegal. It is their use which is prohibited, but it has been shown that British vessels do not clear with fire-arms, that no instance of their use has been established, and that Her Majesty's Government were compelled to withdraw from the arrangement for the sealing of arms, because they found that not only did it no serve to save British vessels from unnecessary interference, but was actually made a pretext for unwarrantable seizures.

They have not omitted to enact legislation necessary to secure the conviction of the guilty, but they have refused to pass legislation certain to embarrass and injure the innocent.

They have refused to seek legislation authorizing an inspection of skins because they do not believe that such an inspection would serve any useful purpose.

They have performed with the utmost rigour all the requirements of the Award, but they have had to make continual and unavailing protests against the attempts of the United States to hamper and embarrass the operations of British subjects pursuing their lawful vocation.

The fact that in spite of these embarrassments British sealers have been able to prosecute their industry with success has led to the continual efforts of the United States to obtain such further Regulations as would effectively prevent that result, without regard to the object aimed at the Tribunal in the Regulations they laid down, which was to preserve the seal fishery for the benefit of both countries.

Her Majesty's Government have never argued that the Regulations were perfect, but, they have maintained that before they can be revised in a scientific manner accurate information as to the increase or decrease of the herd must be available, and that such information can only be obtained by accurate observations extending over a sufficient period to enable accidental circumstances to be eliminated, and as soon as that is at hand they will be ready to enter on a discussion of the question in the impartial and friendly spirit with which they can confidently claim to have acted throughout this controversy.

I am, &c.,

(Signed) EDWARD WINGFIELD.

PROHIBITION OF PELAGIC SEALING BY CITIZENS OF THE UNITED STATES.

Legislation has recently been adopted and approved by the President of the United States prohibiting a citizen of the United States or person owing duty of obedience to the laws or treaties of the United States, or person belonging to or on board a vessel of the United States from engaging in the industry of Pelagic sealing in the waters of the Pacific Ocean, north of the thirty-fifth degree of north latitude, and including Behring Sea and the Sea of Okhotsk.

The text of this Act, together with that of the regulations approved by the President for the enforcement of that part prohibiting the importation of skins taken in such waters into the United States, are contained in the Treasury circular hereunder:—

PROHIBITION OF THE KILLING OF FUR-SEALS IN THE WATERS OF THE NORTH PACIFIC OCEAN, AND OF THE IMPORTATION OF FUR-SEAL SKINS TAKEN IN SUCH WATERS.

TREASURY DEPARTMENT, OFFICE OF THE SECRETARY,

WASHINGTON, D. C., December 30, 1897.

To the Collectors and other Officers of the Customs:

The following act prohibiting the killing of fur-seals in the waters of the North Pacific Ocean, and the regulations made thereunder are published for the information and guidance of all concerned:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That no citizen of the United States, nor person owing duty of obedience to the laws or the treaties of the United States, nor any person belonging to or on board of a vessel of the United States, shall kill, capture, or hunt, at any time or in any manner whatever, any fur-seal in the waters of Pacific Ocean north of the thirty-fifth degree of north latitude and including Behring Sea and the sea of Okhotsk.

SEC. 2. That no citizen of the United States, nor person above described in section one, shall equip, use, or employ, or furnish aid in equipping, using or employing, or furnish supplies to any vessel used or employed, or to be used or employed in carrying on or taking part in said killing, capturing, or hunting of fur-seals in said waters, nor shall any vessel of the United States be so used or employed.

SEC. 3. That every person guilty of a violation of this Act, or of any regulations made thereunder, shall, for each offense, be fined not less than two hundred dollars or more than two thousand dollars, or imprisoned not more than six months, or both; and every vessel, its tackle, apparel, furniture, and cargo, at any time used or employed in violation of this Act, or of the regulations made thereunder, shall be forfeited to the United States.

SEC. 4. That if any vessel of the United States shall be found within the waters to which this Act applies, having on board fur-seal skins or bodies of seals or apparatus or implements suitable for killing or taking seals, it shall be presumed that such vessel was used or employed in the killing of said seals, or that said apparatus or implements were used in violation of this Act until the contrary is proved to the satisfaction of the court.

SEC. 5. That if any violation of this Act or of the regulations thereunder may be prosecuted either in the district court of Alaska or in any district court of the United States in California, Oregon, or Washington.

SEC. 6. That this Act shall not interfere with the privileges accorded to Indians dwelling on the coast of the United States under section six of the Act of April sixth, eighteen hundred and ninety-four, but the limitations prescribed in said Act shall remain in full force.

SEC. 7. That this Act shall not affect in any way the killing or taking of fur-seals upon the Pribilof Islands, or the laws of the United States relating thereto.

SEC. 8. That any officer of the Naval or Revenue-Cutter Service of the United States, and any other officers duly designated by the President, may search any vessel of the United States in port or on the high seas suspected of having violated or of having an intention to violate the provisions of this Act, and may seize such vessel and the offending officers and crew and bring them into the most accessible port of the States and Territory mentioned in section five of this Act for trial.

SEC. 9. That the importation into the United States by any person whatsoever of fur-seal skins taken in the waters mentioned in this Act, whether raw, dressed, dried, or manufactured, is hereby prohibited, and all such articles imported after this Act shall take effect shall not be permitted to be exported, but shall be seized and destroyed by the proper officers of the United States.

SEC. 10. That the president shall have power to make all necessary regulations to carry this Act into effect.

Approved, December 29, 1897.

REGULATIONS.

1. No fur-seal skins, whether raw, dressed, dyed, or otherwise manufactured, shall be admitted to entry in the United States, unless there shall be attached to the invoice a certificate, signed by the United States consul at the place of exportation that said skins were not taken from seals killed within the waters mentioned in said act, specifying in detail the locality of such taking, whether on land or at sea, and also the person from whom said skins were purchased in their raw and dressed state, the date of such purchase, and the lot number. Consuls shall require satisfactory evidence of the truth of such facts by oath or otherwise before giving any such certificate.

No fur-seal skins, raw, dressed, dyed, or otherwise manufactured shall be admitted to entry as part of a passenger's personal effects unless accompanied by an invoice certified by the consul as herein provided.

All fur-seal skins, whether raw, dressed, dyed, or otherwise manufactured, the invoices of which are not accompanied by the certificate above prescribed, shall be seized by the collector of customs and destroyed as provided for section 9 of the act of December 29, 1897.

2. Every article manufactured, in whole or in part, from fur-seal skins, the invoice of which is presented as aforesaid to the consul, shall have legibly stamped thereon the name of the manufacturer and the place of manufacture, and shall be accompanied by a statement in writing under the oath of said manufacturer that said skin or skins used in said article were taken from seals not killed at sea within the waters mentioned in said act, specifying the locality in detail, and also the person from whom said skins were purchased in their raw and dressed state, the date of said purchase and the lot number.

3. When an application is made to a consul for a certificate under these regulations the invoice and proofs or origin presented by the exporter shall be submitted to the Treasury Agent designated for the purpose of investigation, and the consul shall not certify any such invoice until agent shall have made his report.

4. All articles manufactured in whole or in part from fur-seal skins and imported into the United States shall have the linings thereof so arranged that the pelt of the skin or skins underneath shall be exposed for examination.

5. All fur-seal skins, whether raw, dressed, dried, or otherwise manufactured in whole or in part, whether imported as merchandise of a passenger's effects, shall be sent to the public stores for careful examination and inspection to prevent evasion of the law.

All garments made in whole or in part of seal skins, and taken from this country may be re-entered on presentation of a certificate of ownership from the collector of customs of the port of departure, which certificate shall have been obtained by the owner of the garment by offering the same to the collector for inspection before leaving this country.

7. Nothing in these regulations shall affect the right of any officer of the customs to inspect and seize any fur-seal skin or garment imported which he may find to have been imported in violation of said act.

APPROVED

L. J. GAGE, *Secretary of the Treasury.*

WILLIAM MCKINLEY.

THE BEHRING SEA CLAIMS COMMISSION.

The nature and personnel of this commission was explained in the report of last year, and it was shown that the written arguments of the counsel for both countries and the reply of the counsel on behalf of Great Britain, were to be presented in time to permit of a meeting at Montreal on the 16th June of this year.

This was done and pursuant to the adjournment at Victoria the meeting was held at Montreal on the date named.

This meeting occupied one day, some incidental work being necessary besides the examination of some witnesses produced on behalf of the United States.

It was then arranged that the meeting of the commission for the final oral argument of counsel should take place at Halifax, and accordingly the sessions began on the 25th August in the Legislative Council Chamber of the Provincial Building of Nova Scotia.

The argument proceeded without adjournment other than incident to the daily sessions, and was concluded on the 29th September.

The commissioners held their final session at Boston, in December, 1897, and determined the extent to which the United States were liable to Great Britain in respect of the claims filed, assessing the respective amount of compensation to be paid to Her Majesty on behalf of the owners, masters, officers and crews of the

different vessels; the interest allowed being at the rate of 6 per cent, which was the statutory rate at Victoria, British Columbia, during the period covered. The award is distributed as followed:—

	Damages.	Interest.	Award.
<i>Vessels' Claims.</i>	\$ cts.	\$ cts.	\$ cts.
Carolena	13,341 72	9,020 71	22,362 43
Thornton	13,521 10	9,142 53	22,663 63
Onward	9,376 00	6,339 74	15,715 74
Favourite	3,202 00	2,165 08	5,367 08
Anna Beck	21,692 50	13,366 19	35,058 69
W. P. Sayward	12,537 50	7,725 22	20,262 72
Dolphin	31,484 00	19,399 38	50,883 38
Grace	26,213 50	16,125 67	42,339 17
Alfred Adams	10,124 00	6,238 07	16,362 07
Ada	20,902 69	12,880 01	33,782 70
Triumph	1,750 00	1,078 29	2,828 29
Juanita	11,493 00	5,702 44	17,195 44
Pathfinder	13,796 00	6,845 12	20,641 12
Black Diamond	15,173 00	7,528 32	22,701 32
Triumph	15,450 00	7,665 77	23,115 77
Lily	11,739 00	5,832 48	17,571 48
Ariel	4,950 00	2,456 03	7,406 03
Kate	3,050 00	1,513 31	4,563 31
Minnie	8,460 00	4,197 57	12,657 57
Pathfinder	800 00	370 67	1,170 67
Winnifred	3,283 05	1,061 52	4,344 57
Henrietta	9,599 85	2,421 19	12,021 04
Oscar & Hattie	2,250 00	715 05	2,965 05
Totals	264,188 91	149,790 36	413,979 27
<i>Personal Claims of Masters and Mates.</i>			
Daniel Munroe	3,000 00	2,028 50	5,028 50
John Margotich	2,500 00	1,690 42	4,190 42
Hans Guttormsen	3,000 00	2,028 50	5,028 50
Harry Norman	2,500 00	1,690 42	4,190 42
James Ogilvie	3,000 00	2,028 50	5,028 50
James Blake	2,500 00	1,690 42	4,190 42
J. D. Warren	2,000 00	1,232 33	3,232 33
John Reilly	1,500 00	924 25	2,424 25
George R. Ferey	2,000 00	1,232 33	3,232 33
A. D. Laing	1,500 00	924 25	2,424 25
Louis Olsen	2,000 00	1,232 33	3,232 33
M. Keefe	1,500 00	924 25	2,424 25
W. Petit	2,000 00	1,232 33	3,232 33
C. A. Lundberg	1,000 00	616 17	1,616 17
Totals	30,000 00	19,475 00	49,475 00
Grand Totals	294,188 91	169,265 36	463,454 27

It will be seen that in regard to the vessels claims the assessment has been divided thus: damages, \$264,188.91; interest, \$149,790.36; award, \$413,979.27; and in respect of the personal claims of the masters and mates, the division is: damages, \$30,000.00; interest, \$19,475.00; award, \$49,475.00.

The total amount of damages allowed is therefore:—

	Damages.	Interest.	Award.
Vessels	\$264,188 91	\$149,790 36	\$413,979 27
Personal claims	30,000 00	19,475 00	49,475 00
Totals	\$294,188 91	\$169,265 36	\$463,454 27

To this, however, should be added the provisional awards in respect of the schooner "Black Diamond" and of the personal claim of Captain James Gaudin, as follows:—

	Damages.	Interest.	Award,
"Black Diamond"	\$5,000 00	\$3,075 00	\$8,075 00
Capt. Gaudin.....	1,000 00	616 17	1,616 17
	<hr/>	<hr/>	<hr/>
	\$6,000 00	\$3,691 17	\$9,691 17

Which will raise the total award to \$473,145.44.

Owing to the absence from the country of the parties interested, these latter claims were not formulated at the time the schedule which was eventually submitted to the Paris tribunal was prepared, and as a motion for striking them out had been made by the counsel on behalf of the United States before the commissioners, the question was reserved.

It transpired that it was the intention of the parties to the treaty that all claims should be adjudicated upon, and although the commissioners finally dismissed these particular claims as not being within their jurisdiction under the strict terms of the convention, they made, at the instance of the negotiators of the two governments, a separate report finding damages as above stated.

The article on the Behring Sea question contained in the departmental report for 1895, embraces a list and summary of the claims as submitted to the United States Government in the diplomatic correspondence.

RUSSIAN SEIZURES—"WILLIE MCGOWAN" AND "ARIEL."

In the report for 1893, p. CIV, under the heading "Pelagic fur-sealing," is an account of the seizure of Canadian schooners by the Russian authorities in 1892, together with the text of the decision in each case, of a commission appointed by the Russian Imperial government to enquire into the several cases.

Among the seized schooners were the "Willie McGowan" and "Ariel," in respect of which the commissioners decided that the seizures were not regular, although maintaining the other seizures and interferences, some seven in number.

An offer was made by the Russian Government of \$40,078.75, compensation for the seizure of these two vessels which offer was accepted by both Her Majesty's government and that of Canada as a full settlement of the claims of the "Willie McGowan" and "Ariel."

Respectfully submitted,

R. N. VENNING.

Ottawa, 31st December, 1897.

APPENDIX No 14.

SCHEDULE of Fishery Officers in the Dominion of Canada, as revised to December, 1897.

NOTE—Names in *italics* receive no salary, (Of.) means Officers, (W.) Wardens, (I.) Inspectors, (G.) Guardians and (Agt.) Agent.

PROVINCE OF ONTARIO.

Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
Sheppard, O. B. ....(I.)	Toronto	Province of Ontario.
Dunn, Capt. E.	Owen Sound.....	Having jurisdiction over Georgian Bay and the Great Lakes.
Pearson, Capt. Geo. Wm.	do	do the whole province of Ontario.
Kyle, Morrison.....	Rat Portage.....	Lake of the Woods and other waters of Rainy River district.
Cross, J. W.	Port Arthur.....	The whole district of Algoma.
<i>Pim, Chas. Jas.</i>	Caribou Island.....	Lake Superior around Caribou Island.
Elliott, Thos. H.	Sault Ste. Marie..	From the Otter Head, Lake Superior to French River, Algoma
Macdonald, J. K.	Toronto	Lake Kagawong, Manitoulin Island.
<i>Boyd N. M.</i>	Kagawong	do do
<i>Lamorandiere P. R. de.</i>	Killarney.....	Georgian Bay, from Current to French River.
<i>Barron, Ed., jr.</i>	French River.....	do from Killarney to Byng Inlet.
<i>Lamondin, Joseph.</i>	Byng Inlet.....	do Gladstone Island to Sophia Rock.
<i>Huff, Thomas W.</i>	Jones' Island.....	do part of Parry Sound Harbour.
<i>White, C. L.</i>	Snug Harbour.....	do vicinity of Pointe au Baril.
<i>Columbus, Chris.</i>	Penetanguishene..	Part of Murray Township, Muskoka District.
Smith, Frank J.	Midland.....	Georgian Bay, from French River to Point Marks.
<i>Marchildon, Thos.</i> ...	Lafontaine.....	do from Point Marks to Pointe Boucher.
Edmonstone, Robt ...	Ballaclava.....	do around Christian, Hope and Beckwith Islands.
Lennox, Isaac	Warton.....	do from Allanwood to Colpoys Bay.
<i>Boyd, W. S.</i>	North Keppel.....	do from Colpoys Bay to Cape Hurd.
Briggs, Chas.	Paisley.....	do around Griffith Island.
Ball, H. W.	Goderich.....	Lake Huron, from Cape Hurd to Southampton, inclusive.
Quarry, H. B.	Parkhill.....	do from Southampton to Goderich, inclusive.
Pollock, J. C.	Forest.....	do from Goderich to Blue Point.
Raymond, C. W.	Mitchell's Bay....	do and St. Clair River, Blue Point to Baby's Point.
Boismier, Joseph.....	Sandwich.....	Lake St. Clair, from Little Lake to its head.
Stewart, John	Point Pelee Island.	do from Dover East to the mouth of Detroit.
<i>Bartlett, Horace H</i> ...	North Harbour Id.	River, and from thence to its outlet.
Lamarche, Peter.....	Wheatley.....	Lake Erie, around Point Pelee Island and adjacent islands.
<i>Malott, E. A.</i>	Kingsville.....	do North Harbour and Middle Sister Islands.
Laird, Jas. K.	Blenheim.....	do do Essex.
Freeland, Wm.	St. Thomas.....	do do Kent and inland waters.
Sharp, David.....	Port Ryerse.	do do Elgin.
Couper, Archibald ...	Dunnville.....	Lake Erie, fronting on the counties of Norfolk, Haldimand, as far as South Cayuga.
Farrell, John.....	Cayuga.....	Lake Erie, from South Cayuga to Moulton Bay and Grand River, from mouth to division lines, townships of Canborough and North Cayuga.
Kerr, Fred.....	Hamilton.....	Grand River, from and including North Cayuga to Brantford.
Sargent, Wm.	Bronte.....	Having jurisdiction over all Ontario, but district proper comprises Lake Ontario, from Burlington Beach, to Niagara River and Lake Erie to Low Banks.
Stobo, Isaac.....	Scarboro'	Lake Ontario, from Burlington Beach to Port Credit.
<i>Hall, Thos</i>	Lloydstown.....	do fronting county of York.
Freeman, Sylvanus... ..	Brighton.....	Hall's Lake, York County.
Gilchrist, Chas.....	Port Hope.....	Lake Ontario, fronting on the counties of Northumberland and Durham and tributaries thereof.
		Rice Lake in electoral district of West Northumberland with Trent and Keene Rivers and tributaries thereto.

FISHERY OFFICERS.

SCHEDULE of Fishery Officers, &c.—Continued.

PROVINCE OF ONTARIO—Continued.

Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
Perry, Chas.	Port Whitby.	Lake Ontario, fronting on the county of Ontario South.
Clarke, W. P.	Belleville.	Bay of Quinté, from Deseronto to head waters of said bay in the township of Murray, also that portion of Trent River in counties of Northumberland and Hastings.
Redmond, Joseph, jr.	Pictou.	Lake Ontario, fronting on the county of Prince Edward.
Sills, E. H.	Napanee.	do counties of Lennox and Addington, and upper part of Amherst Island.
Finkle, R. R.	Bath.	Lake Ontario, fronting Earnestown township in Lennox and Addington, and the lower part of Amherst Island.
Crosby, A. H.	Belleville.	Head of Bay of Quinté from Three Brothers' Island, near Kingston, to Trenton.
Vanass, Philip.	Wolfe Island.	Lake Ontario, around Wolfe, Horse-shoe and Pigeon Islands.
Ward, Wm.	Toronto.	The waters around Toronto Island, including Toronto and Ashbridge Bays and River Don.
Purdy, John.	Kingston.	Lake Ontario, fronting on the townships of Pittsburg and Kingston, county Frontenac.
Craig, Wm. (G).	Glenburnie.	Township of Storrington, county Frontenac.
Cox, John.	Howe Island.	Lake Ontario and River St. Lawrence, around Howe Island.
Acton, Nassau.	Gananoque.	River St. Lawrence, from Wolfe Island to Jack Straw Light-house, Admiralty Islands; also part of Gananoque River.
Davis, John H.	Gananoque.	River St. Lawrence, Sheriff's Point to Head of Grenadier Id.
Poole, Robt.	Poole's Resort.	do from Rockport to Prescott.
Mooney, John.	Maitland.	do from Brockville to Cornwall.
Miron, Olivier.	Alfred.	South Nation River, county of Prescott.
Boucher, W. W.	Ottawa.	Ottawa River and its tributaries, from Ottawa to Fitzroy township, county of Carleton.
Riddle, Matthew.	Mohr's Corners.	Ottawa River, from Fitzroy to McNab, including Lake des Chats.
Hicks, H.	Arnprior.	Ottawa River, from McNab to Horton and Lake des Chats.
Richardson, C. S.	Sturgeon Falls.	Lake Nipissing, Sturgeon, Mattawa River, French River and tributaries.
Bastedo, David E.	Bracebridge.	Townships of Macaulay, McLean, Ridout in N. R. Ontario Co., and Franklin, Bennett and Stephenson in Mukoka.
Castle, Henry.	Gravenhurst.	Lakes Muskoka, Skeleton, Rousseau and Joseph.
Green, Jediah.	Stirling.	Townships of Huntingdon, Hungerford, Sydney, Thurlow and Tyendinaga, county Hastings.
Steele, George R.	Lorimer Lake.	Townships in Parry Sound of Cowper, Foley, Christie, McDougall, McKellar, Ferguson, Carling, Shawanaga, Burpee, Hagerman, Harrison, Burton and Mackenzie.
Forsyth, Edmund.	Loring.	Townships of Walbridge, Brown, Wilson's Mills, Mowat, Blair, McKonkey and Hardy, in Parry Sound.
Lockhart, Wm.	Denville.	Townships of Croft, Chapman, Strong, Joly, Laurier, Machar, Lount, Ferrie, Mills, Pringle, Gurd and Himsworth, in Parry Sound.
Clarke, Geo.	Orillia.	Lakes Simcoe and Couchiching, also Rivers Severn and Holland.
McDermott, Wm.	Beeton.	South Riding of the county of Simcoe.
McFayden, H.	Durham.	The head waters of Saugeen River and tributaries.
.....	.....	North branch of Sydenham River, from junction with main river, to its sources.
McQueen, Tim.	Chatham.	River Thames, from its mouth to Lewisville.
Crotty, John.	Bothwell.	do from Lewisville to Wardsville.
McCann, Peter.	London.	do from Wardsville to London.
Croome, W. P.	Mount Vernon.	Grand River and its tributaries, from Brantford upwarks.
.....	.....	North Riding of the county of Wellington.
Coleman, David.	Alton.	The whole Electoral District of Cardwell.
Hughson, Andrew.	Orangeville.	Credit River and its tributaries in the counties of Dufferin and Peel.
Veal, John.	Nestleton.	East side Lake Scugog southerly including the east side of Scugog Island in the township of Reach, county Ontario and fronting in township Cartwright in county of Durham.
Blakely, Alex.	Port Credit.	Credit River from Norval to its mouth, in the county of Peel.
Bowerman, John.	Port Perry.	West side of Lake Scugog from Washburn's Island including west side Scugog Island township of Reach.
Bradshaw, Arch.	Lindsay.	Inland waters of township of Ops, Victoria County.

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF ONTARIO—*Concluded.*

Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
Bowen, J. C.	Marmora	Townships of Marmora, Madoc, Elzever, Rawdon, and Belmont.
Fitzgerald, Geo. W.	Lakefield	The county of Peterborough within the townships of Harvey, Burleigh, Dummer, Douro, Smith and Ennismore, also Otonabee River from Peterborough to Rice Lake.
Breeze, David	Peterborough	Otonabee River, from Peterborough to Rice Lake, county of Peterborough.
Gainforth, Wm.	Haliburton	Gull and Burnt Rivers and tributaries, with Drag, Eagle, Moose, Redstone and Crooked Lakes, in Peterborough.
Sweet, B. H.	Bancroft	Inland waters of Hastings County, lying north of townships of Lake, Tudor and Grimsthorpe.
Purcell, H. R.	Enterprise	Townships of Camden, Portland, Loughboro', Sheffield and Kennebec, in Addington.
Stalker, Jas.	Plevna	Townships of Palmerston, Clarendon, North Canonto, South Canonto and Miller, in Addington.
Lake George	Tichbourne.	That part of Frontenac north of Loughboro' Lake.
Flood, Ant. J.	Delta	Upper and lower Beverly Lakes and Wiltse and Mud Lakes, in Leeds, and tributaries to Morton, Lyndhurst and Griffin Lakes, in the county of Leeds.
Moorehead, John	Long Point	From Lyndhurst to the division line, between Leeds and Lansdowne, in the county of Leeds.
Greer, Jas.	Outlet	Gananoque River from Marble Rock to township of Lansdowne, county of Leeds.
Bullis, S. Y.	Athens	Charleston Lake, in the county of Leeds.
Jeacle, George	Westport	Rideau, Upper Rideau, Openicon, Otty, and neighbouring Lakes, county of Leeds.
Ross, Jas. H. (G) ..	Smith's Falls	Rideau River, Burritt's Rapids to Smith's Falls.
Deacon, Eph.	Bolingbroke	River Tay and tributaries, and Fall Bay River, in Lanark.
Campbell, R. O.	Burritt's Rapids ..	Rideau River and tributaries, from Ottawa to Burritt's Rapids, including Jock River, in Carleton.
McCuaig, R. C. W.	Ottawa	Province of Ontario.

PROVINCE OF QUEBEC.

Hon. Peter Mitchell (I.) ..	Montreal	Province of Quebec and Maritime Provinces.
Lavoie, Nap. (Of.)	L'Islet	Lower St. Lawrence River and Gulf.
Gregory, J. U. (Agt.)	Quebec	Having jurisdiction in the whole province of Quebec.
Smith, Joseph	Cedar Hall	Lake and River Metapedia, in the county of Bonaventure.
Brown, Chas.	Escuminac	Restigouche River and its tributaries in the Cos. of Restigouche and Victoria, N.B., and Rimouski and Bonaventure, P.Q.
Green, Jas.	Magnasha	Bay des Chaleurs, Co. Bonaventure, coast from Magnasha to Grand Cascadepia River, inclusive.
Forest, George	Bonaventure River ..	Bay des Chaleurs, Co. Bonaventure, coast from Grand Cascadepia River to Pasbebiac.
Chapados, F. X.	L'Anse au Gascon ..	Bay des Chaleurs, Co. Bonaventure, coast from Pasbebiac to Point Macquereau.
Keays, John	Pabos	County of Gaspé, Point Macquereau to corner of the Beach.
Langlois, Walter	Douglstown	do from corner of the Beach to Cape Rosier.
Aspireau, Moïse	Griffin Cove	do from Cape Rosier to Fame Point.
Chevrier, J. A.	Amherst, M. I.	Gulf of St. Lawrence around the Magdalen Islands.
*Joncas, P. L.	House Harbour, Magdalen Islands	Magdalen Islands, except Amherst and Entry Islands.
Letourneau, Louis	Montlouis	River St. Lawrence, county of Gaspé, from Fame Point to Duchesnay township.
Bouchard, Didace	Ste. Anne des Monts ..	River St. Lawrence, county of Gaspé, parishes of Duchesnay, Christie, Tourelle and Cap Chatte.
Marin, Fabien	Ste. Félicité	River St. Lawrence, county of Rimouski, from Cap Chatte to River Blanche, including River Matane.
Thériault, Edouard	Rimouski	River St. Lawrence, county of Rimouski.
Lavoie, Zéphirin	St. Anaclet	River St. Lawrence, County Rimouski.
Levesque, Nap.	Isle Verte	River St. Lawrence, fronting on the county of Témiscouata.

*Collector of customs ; specially connected with the fishing bounty.

SCHEDULE of Fishery Officers, &c.—Continued.

PROVINCE OF QUEBEC—Continued.

Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
Sirois, George.....	Kamouraska.....	River St. Lawrence, fronting on the county of Kamouraska, to Pointe à la Loupe, county Témiscouata.
Gagnon, Ephrem.....	St. Michel de Bellechasse.	River St. Lawrence, fronting on the counties L'Islet, Montmagny, Bellechasse and Lévis.
Huot, L. P.....	St. Roch de Québec	River St. Lawrence, around the Island of Orleans.
Bhéreur, U.....	Malbaie.....	North Shore of the River St. Lawrence, fronting on the county of Charlevoix.
.....	.....	Lakes in rear of Murray Bay and Bay St. Paul.
Catellier, L. N.....	Tadoussac.....	Waters of counties of Chicoutimi and Saguenay.
Comeau, N. A.....	Godbout.....	Gulf of St. Lawrence, county of Saguenay from Manicouagan to Baie des Rochers, (Godbout Division).
Mignault, T.....	Montmagny.....	Gulf of St. Lawrence, county of Saguenay from Baie des Rochers to Point St. Charles, (Mosisie District).
Duburger, Geo.....	Pointe à-Pic, Charlevoix.	Gulf of St. Lawrence, county of Saguenay from Sheldrake River to Esquimaux Point, (Mingan Division).
Gaudin, Geo.....	Cape Cove, Gaspé.	Gulf of St. Lawrence, on the county of Saguenay from Esquimaux Point to Natashquan River.
Legouvie, John (W.).....	Lobster Cove, — Gaspé.	Gulf of St. Lawrence, county of Saguenay and extending from Cape Whittle to Checatia, (St. Augustin Division).
Whitely, W. H.....	St. John's Nfld....	Gulf of St. Lawrence, county of Saguenay, from Checatia to Blancs Sablons, (Bonne Espérance Division).
Lemay, David.....	New Ireland.....	Lakes Trout, William, Black, St. Joseph and county of Mégantic.
McCaw, John.....	Sherbrooke.....	Lakes in counties of Sherbrooke and Stanstead, also Lakes Brompton and Aylmer, in the counties of Richmond and Wolfe.
Dupuy, Louis.....	do.....	Counties of Richmond and Wolfe.
McLeod, Allan.....	Echo Vale.....	About 10 miles of the waters of Lakes Mégantic and Spider with the tributaries in the county of Compton.
Carr, Guy.....	Compton Station..	County of Compton and Lake Massawippi, and tributaries in county of Stanstead.
Boynton, Chas. G....	Georgeville.....	The east half of Lake Memphremagog, in the Co. of Stanstead.
Ball, Hugel.....	Tuck's Landing....	The west side of Lake Memphremagog, in the county of Brome.
Phelps, Sylvester E. W..	Bolton Centre.....	Township of Bolton, east and west, in the county of Brome.
Sturtevant, Sydney....	Knowlton.....	Brome Lake, county of Brome.
Manson, Jeremiah M....	Potton.....	Township of Potton, county of Brome.
Needham, Ernest E....	Bolton Glen.....	Township of east and west Bolton, county of Brome.
Luke, P. E.....	Philipsburg.....	Missisquoi Bay and Pike River, in the county of Missisquoi.
Levéque, Pierre.....	Grande Ligne.....	Richelieu River, from St. Johns to Lake Champlain.
Dion, J. O.....	Chambly Canton..	Richelieu River, from Sorel to Richelieu Village.
DeWitt, Henry.....	Châteauguay.....	Lake St. Louis, west to and from Mouth of Châteauguay River, including said River to Châteauguay Town, extending to western boundary of Beauharnois.
Barrette, Honoré.....	do.....	River St. Lawrence, county of Châteauguay westward to the Mouth of Châteauguay River.
Reid, Zotique.....	Ste. Philomène....	Inland waters county Châteauguay except that part of Châteauguay River from the town of Châteauguay to its Mouth.
Riendeau, Joseph.....	Jacques Cartier Square, Montreal	River St. Lawrence, from Huntington southern boundary to Three Rivers.
Morris, John.....	St. Lambert.....	River St. Lawrence, the counties of Chambly and Laprairie and city of Montreal.
Robitaille, Chas.....	St. Sulpice.....	St. Lawrence River, counties of L'Assomption and Verchères, including inland waters.
McMillan, John D.....	Dundee.....	That part of St. Lawrence River known as Lake St. Francis, fronting on the county of Huntington, including inland waters.
Mongeau, Paul.....	Sorel.....	River St. Lawrence, fronting on the county of Richelieu.
.....	.....	Lake St. Peter, county of Yamaska, and the upper part of River St. Francis, within said county.
Piché, L. N.....	Drummondville....	River St. Francis, in the county of Yamaska, to Richmond.
Boisvert, Geo.....	Bécancourt.....	River St. Lawrence and Lake St. Peter, county of Nicolet.
.....	.....	do fronting on and including the county of St. Maurice and Three Rivers.
Caron, Gabriel.....	Louiseville.....	River St. Lawrence and Lake St. Peter, counties of Maskinongé and Berthier.

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF QUEBEC—*Concluded.*

Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
Filiatrault, Damien.....	Ste. Rose, Laval..	The Rivers Jésus and des Prairies, in the counties of Terrebonne, Two Mountains, Laval, Jacques Cartier and Hochelaga.
Belisle, Jos.....	Ste. Agathe des Monts	County Terrebonne.
Montpetit, Julien.....	Isle Perrot.....	River St. Lawrence, fronting on Jacques Cartier County.
Boivin, Jos.....	River Beaudet	do surrounding Isle Perrot.
Paquet, Urgèle.....	St. Andrew's East.	do fronting on the county of Soulanges.
Quesnel, Arthur.....	Rigaud.....	Lower Ottawa River, from Ôka to Carillon, and North River, from its mouth to Lachute.
Vinet, Victor.....	Vaudreuil.....	Ottawa River, from Point Fortune to Como.
Chenier, P. Dosithé.....	Hull.....	Ottawa River, from Como to Point Cascades.
<i>Weisner, Emiel.....</i>	<i>Blanche.....</i>	Both sides of the Ottawa River, fronting on the counties of Ottawa and Russell, and Prescott, in Ontario.
Mohr, Irwin.....	South Onslow.....	Townships of Mulgrave and Lathbury, Ottawa county.
Coghlan, J. T.	Chapeau.....	North side of Ottawa River, fronting on the county of Pontiac, from county line to River Coulonge.
		Ottawa River, county of Pontiac, from Fort Coulonge to Des Joachims.

PROVINCE OF NOVA SCOTIA.

Bertram, A. C. ....(I.)..	North Sydney.....	District No. 1.—Cape Breton Island.
Hockin, Robt.....(I.)..	Pictou.....	District No. 2.—Cumberland, Colchester, Pictou, Antigonish, Guysboro', Halifax and Hants counties.
Ford, L. S. ....(I.)..	Milton	District No. 3.—Lunenburg, Queen's, Shelburne, Yarmouth, Digby, Annapolis and King's counties.
	<i>Annapolis County.</i>	
Parker, Hamilton... ..	Port George	The whole county of Annapolis.
	<i>Antigonish County.</i>	
McAdam, Alex. R.	Malignant Cove...	The whole county of Antigonish.
	<i>Cape Breton County</i>	
McPherson, Joseph.....	North Sydney	The whole county of Cape Breton.
Lovitt, Henry.....	Louisburg	Cape Breton County.
McCuish, John.....	Scatarie	do
McDonald, Joseph.....	Little Loraine	do
McInnis, Michael R.....	Amagnadus Pond.....	do
McLean, John.....	Gabarus Lake.....	do
McLean, Murdock.....	Leitch's Creek.....	do
Rees, C. E.....	Cow Bay.....	do
Sullivan, Timothy.....	Little Bras d'Or...	do
	<i>Colchester County.</i>	
Davidson, J. W.	Bass River.....	The county of Colchester.
McGregor, E. H.....	Lower Stewiacke...	do
	<i>Cumberland County</i>	
Fowler, Elijah	Parrsboro'	County of Cumberland.
Angevine, Frank.....	Middleboro'	do
Reid, John D.....	Pugwash.....	do
Smith, Geo. O.....	Oxford.....	do
	<i>Digby County.</i>	
Bishop, Geo. B.....	Digby.....	Municipality of Digby.
German, Wm.....	Meteghan	do of Clare.

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF NOVA SCOTIA—*Continued.*

Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
<i>Guysboro' County.</i>		
Davis, Joseph.....	Guysborough	County of Guysborough.
Reid, Alex.....	Port Hillford.....	do
<i>Halifax County.</i>		
Kennedy, Wm.....	Hubbard's Cove....	County of Halifax.
Gaston, Robert.....	Pope's Harbour....	do
Rowlings, Geo.....	Musquodoboit Hr..	do
<i>Hants County.</i>		
Mosher, Jas. R.....	Kempt Shore.....	County of Hants, West Hants.
<i>Inverness County.</i>		
McLean, D. F.	Port Hood.....	No. 1—Western division.
McLellan, John B.	River Inhabitants.	No. 2—Southern division.
McKeen, Lewis.....	Mabou.....	No. 3—Mabou division.
Chisholm, Arch. A.....	S. W. Margaree....	No. 4—Eastern division.
Ingraham, Albert.....	N. E. Margaree....	No. 5—Northern division.
Aucoin, Wm.....	Eastern Harbour..	No. 6—Part of Northern division.
McIntosh, Angus.....	Pleasant Bay.....	Inverness coast from Pleasant Bay to Meat Cove inclusive.
McDonnell, Duncan....	Long Point.....	do do Long Point to Low Point.
<i>King's County.</i>		
Miller, Jas. S.....	Canning.....	The whole of King's county.
McIntyre, W.....	Aylesford.....	do do
Reid, R. F.....	Wolfeville.....	do do
<i>Lunenburg County.</i>		
Webber, John A.....	Chester.....	The whole county of Lunenburg.
Solomon, W. M.....	W. LaHave Ferry.	do do
<i>Pictou County.</i>		
McDonald, Alex. J.....	Bailey's Brook	Eastern division, from Antigonish county line to Pictou Hr.
McQueen, J. D.....	Little Harbour....	Southern division, comprising Sutherland, Moose, East and St. Mary Rivers.
Pritchard, A. O.....	New Glasgow.....	Central division, comprising Pictou Hr., and East, West and Middle Rivers.
Kitchin, James.....	River John.....	Western division, from Colchester Co. line to Cole's Reef, Pictou Hr.
<i>Queen's County.</i>		
Freeman, J. N.	Liverpool	The whole of Queen's county.
<i>Richmond County.</i>		
Boyle, Dougald R.....	Arichat West.....	No. 1. Isle Madame and Arichat Division.
Morrison, Archd.....	Cannes.....	(No. 2. Western). Whole county.
Brymer, Arthur.....	Lower L'Ardoise..	No. 3. Eastern division.
<i>Shelburne County.</i>		
Hines, Geo. K.....	Shelburne	The whole of Shelburne county.
Goudey, E. S.....	Barrington.....	From Clyde River to Yarmouth county.
<i>Victoria County.</i>		
Campbell, Chas. L.	New Campbellton.	No. 2. Middle division.
McCharles, Danl.....	Middle River.....	No. 3. Southern division.
Hellen, Wm.....	Cape North.....	The whole of Victoria county.
Fraser, Jno. A.....	Baddeck.....	do do

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF NOVA SCOTIA—*Concluded.*

Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
	<i>Yarmouth Co.</i>	
Hatfield, Abram M.....	Arcadia	The whole of Yarmouth county.

PROVINCE OF NEW BRUNSWICK.

Pratt, J. H. ....(I)...	St. Andrews ..	District No. 1. The county of Charlotte.
Chapman, Robt. A. (I)...	Moncton.....	District No. 2. Restigouche, Gloucester, Northumberland, Kent, Westmorland and Albert counties.
Miles, H. S. ....(I)...	Oromocto.....	District No. 3. St. John, King's Queen's, Sunbury, York, Carleton and Victoria counties.
Harding, F. J. ....(Agt)...	St. John.....	The whole province.
	<i>Albert County.</i>	
Dowling Caleb. S.....	Alma	The whole county of Albert.
	<i>Charlotte County.</i>	
Brown, Barth.....	Campobello.....	Vicinity of Campobello and West Isles.
Campbell, D. F.	St. Andrews.	Inner Bay, Passamaquoddy.
Chancy, Warren	Grand Manan.....	Grand Manan Island and spawning grounds.
Mathewson, John.....	St. George.....	Parishes of St. George, Pennfield and Lepreau.
Todd, Frank.....	St. Stephens	The whole of Charlotte county.
	<i>Gloucester County.</i>	
Doucet, Jérôme E.	Petit Rocher.....	County of Gloucester.
Canty, Thos.	Bathurst.....	do do
Robichaud, Wm C.	Inkerman.....	do do
	<i>Kent County.</i>	
Leblanc, Olivier J. O.	Buctouche.....	Parishes of Wellington and St. Mary.
Hannah, Wm. J.	Richibucto.....	The whole county of Kent.
	<i>King's County.</i>	
Brown, James.....	Hammond Vale...	Lakes in Hammond Parish.
	<i>Northumberland Co</i>	
Williston, J. G.	Bay du Vin	South part Miramichi Bay to Point au Quart.
Abbott, Lemuel.....	Chatham.....	Miramichi River to Newcastle.
	<i>Queen's County.</i>	
Hetherington, J. T.	Johnston.....	The whole of Queen's county.
	<i>Restigouche County.</i>	
McLean, Donald.....	Charlo.	Baie des Chaleurs, Belledune to Dalhousie.
Brown, Chas.	Escuminac, P.Q....	From Dalhousie to Tide Head.
	<i>Sunbury County.</i>	
McLean, Cecil H.....	Burton.....	County of Sunbury.
	<i>St. John County.</i>	
Cochrane, John.....	I.C.R. Station, St. John.....	St. John city and vicinity.
O'Br Joseph.....	Carleton, St. John	St. John county.

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF NEW BRUNSWICK—*Continued.*

Name of Overseer.	P. O. Address.	Extent of Jurisdiction.
	<i>Victoria County.</i>	
Wilson, Leonard.....	Grand Falls. . . .	The whole county of Victoria.
	<i>Westmorland Co.</i>	
Melançon, Ambroise....	Pré d'en haut.....	Dorchester Parish and Petitcodiac River.
Copp, Geo. E.....	Bay Verte.....	Parishes of Sackville and Westmorland and part of Botsford.
Leblanc, N. D.....	Shediac.....	Parishes of Salisbury, Moncton, Shediac and that part of Botsford to Big Shemogue Harbour.
	<i>York County.</i>	
Orr, Robt.....	Fredericton.....	The whole county of York.

PROVINCE OF PRINCE EDWARD ISLAND.

Lord, A.....(Agt.)..	Charlottetown....	Prince Edward Island.
Matheson, J. A....(I.)..	Campbellton....	do do
Davison, John.....	Bedecque.....	The county of Prince.
Nolan, Dan.....	Souris.....	do of King's.
Hobkirk, W. C.....	Charlottetown....	do of Queen's.

PROVINCE OF MANITOBA.

Tupper, R. Latouche (I.)	Selkirk.....	The province of Manitoba.
Gardner, Rich.....	do.....	do do
Martineau, H.....	The Narrows, Lake Manitoba.....	Lakes Manitoba, Ebb and Flow, Dog and tributaries.
Gunn, Robt.....	Winnipeg.....	Within his district as forest ranger.
Stevenson, E. F.....	do.....	In his district as Crown timber agent.

NORTH-WEST TERRITORIES.

Miller, E. W.....	Qu'Appelle.....	All the North-west Territories.
Foster, John.....	Silton.....	The Silton District.
Young, Harrison S.....	Edmonton.....	District of Edmonton.
Cook, R. S.....	Prince Albert.....	do of Prince Albert.
Lucas, S. B.....	Holbrooke.....	do of Peace Hills, Alberta.
McKenzie, R. S.....	Stobart.....	do of Prince Albert, Saskatchewan.
Thompson, J. R.....	Calgary.....	do vicinity of Calgary.

PROVINCE OF BRITISH COLUMBIA.

McNab, John.....(I.)..	New Westminster.	The province of British Columbia.
McKay, J. W.....	Kamloops.....	District of Yale, B.C.
Meason, W. L.....	William's Lake....	Kootenay, R., from Clinton to Barkerville.
Philips, Michael.....	Kootenay.....	do district.
Higginson, T. S.....	New Westminster.	In his district as Crown timber agent.
Ellison, Price.....	Vernon.....	O'Kanagan lake and river.
Gaudin, Capt. James (Ag)	Victoria.....	Having jurisdiction in the whole province.
Walbran, J. T., Capt....	do.....	do do do
Galbraith, N. M.....	do.....	do do do

SCHEDULE of Fishery Officers, &c.—*Continued.*

FISH CULTURE.

Name.	Rank.	P. O. Address.
Kenefick, John.....	Officer in charge of Government Fish Hatchery.....	Newcastle, Ont.
Parker, Wm.....	do do.....	Sandwich, Ont.
Walker, John.....	do do.....	Ottawa, Ont.
Finlayson, Alex.....	Asst. officer in charge of Government Fish Hatchery.....	Magog, Que.
Catellier, L. N.....	Officer in charge of Government Fish Hatchery.....	Tadoussac, Que.
Davis, Henry.....	do do.....	Gaspé Basin, Que.
Mowat, Alex.....	do do.....	Campbellton, N.B.
McCluskey, Chas.....	do do.....	Grand Falls, N.B.
Sheasgreen, Isaac.....	do do.....	South Esk, Miramichi, N.B.
Ogden, A.....	do do.....	Bedford Basin, N.S.
do.....	Government Lobster Hatchery.....	Pictou, N.S.
Kehoe, W.....	Asst. officer in charge of Government Fish Hatchery.....	Sydney, C.B., N.S.
McNab, John.....	Officer in charge of Government Fish Hatchery.....	New Westminster, B.C.
Tupper, LaTouche, R.....	do do.....	Selkirk, Man.
Kemp, Ernest.....	do Oyster culture.....	Ottawa, Ont.

All captains of the Fisheries Protection Service are also fishery officers, with power of a justice of the peace for all purposes of the Fisheries Act. During the season of 1897 they were as follows:—

Commander O. G. V. Spain, of the cruiser "Acadia."
 Capt. S. Bélanger, of the cruiser "Aberdeen."
 Capt. J. H. Pratt, of the cruiser "Curlew."
 Capt. Geo. M. May, of the cruiser "Constance."
 Capt. W. H. Kent, of the cruiser "Kingfisher."
 Capt. C. T. Knowlton, of the cruiser "Osprey."
 Capt. Ed. Dunn, of the cruiser "Petrel," for Ontario.
 Capt. G. W. Pearson, of the cruiser "Dolphin," for Ontario.
 Capt. J. T. Walbran, of the cruiser "Quadra," for British Columbia.

RECAPITULATION OF FISHERY OFFICERS.

Province.	Number of Officers.
Ontario.....	100
Quebec.....	69
Nova Scotia.....	58
New Brunswick.....	31
Prince Edward Island.....	5
Manitoba.....	5
North-west Territories.....	7
British Columbia.....	9
Officers and crews of the fisheries protection vessels.....	178
Fishery guardians employed during the season of 1897.....	210
Total.....	672



